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## COURSE DRAW LOGIC

Courses in this listing are active as of the Spring 2020 term. Course listings will 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

Ethnic S

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 substantia 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.

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.
Work

Foreign
Language

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.

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.

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.
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.
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.
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.

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.

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.

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

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.

## ACCOUNTING AND INFORMATION SYSTEMS (ACCT IS)

## ACCT IS 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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program. Not open to students with credit for ACCT I S 300
Repeatable for Credit: No
Last Taught: Fall 2020

## ACCT IS 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. Enroll Info: None
Requisites: ACCT IS 100 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## ACCT I S 300 - ACCOUNTING PRINCIPLES

3 credits.
Introduction to accounting from a user's perspective. Covers both financial and managerial accounting. Accounting theory principles, presentation and interpretation of financial reports, financial statement analysis. Measurement, classification, planning and control of costs. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR) A requirement and junior standing. 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: Fall 2020

## ACCT IS 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. Enroll Info: None
Requisites: ACCT I S 100 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Junior standing and ACCT I S 301
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: ACCT I S 211
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: ACCT I S 100, 300, or LAW 811. Not open to students declared in BUS: Accounting BBA program
Repeatable for Credit: No
Last Taught: Spring 2020

## ACCT I S 340 - ACCOUNTING SYSTEMS

3 credits.
Principles and problems of system design; organization for accounting control, internal control procedures and internal reports. Developing control, security, and auditability into information system applications. Enroll Info: None
Requisites: Junior standing and ACCT I S 211
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 - ADVANCED FINANCIAL REPORTING

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. Enroll Info: None Requisites: ACCT I S 302
Repeatable for Credit: No
Last Taught: Fall 2020

## ACCT I S 600 - ACCOUNTANCY INTERNSHIP AND PRACTICE RESEARCH

## 3-6 credits

An opportunity for students to experience a professional accounting practice first hand and to integrate this experience with their formal education. Enroll Info: None
Requisites: Member of Accounting 5 Year Masters and (ACCT IS 620 and 630) or concurrent enrollment in ACCT I S 601

Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2020

## ACCT I S 601 - PROFESSIONAL PRACTICE ISSUES IN ACCOUNTING AND <br> AUDITING <br> 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. Intensive three week course to build on experiences developed during the internship program. Enroll Info: None
Requisites: Member of Accounting 5 Year Masters and (ACCT I S 620 and 630) or concurrent enrollment in ACCT I S 601

Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: ACCT I S 302 or 702
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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, passthrough entities, and individuals. Enroll Info: None
Requisites: ACCT I S 301 or concurrent enrollment or member of
Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None

## Requisites: ACCT I S 620

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ACCT I S 630 - AUDIT AND ASSURANCE SERVICES
3 credits.
Evolution of assurance services; role of assurance services as part of corporate governance; professional standards and ethical concepts; evidence concepts and evaluation of evidence, business and information technology risk analysis, the audit risk model, assurance reports, and development of audit and assurance programs. Enroll Info: None
Requisites: Senior standing and ACCT I S 301
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ACCT IS 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. Enroll Info: None
Requisites: ACCT I S 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 orther external users, including dilutive securities, investments, revenue recognition, income tax allocation, pensions, leases and accounting changes. Enroll Info: None
Requisites: ACCT I S 701
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ACCT I S 706 - ADVANCED FINANCIAL REPORTING
3 credits.
Accounting principles related to formation, maintenance, expansion, contraction and liquidation of the business enterprise. Enroll Info: None Requisites: ACCT I S 701
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ACCT I S 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ACCT IS 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. Enroll Info: None
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 - TAXATION OF PASS-THROUGH ENTITIES

 3 creditsAnalysis 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. Enroll Info: None
Requisites: ACCT I S 620
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ACCT I S 724 - RESEARCH AND ADMINISTRATIVE ISSUES IN TAXATION

 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. Enroll Info: None
Requisites: ACCT I S 620
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ACCT IS 725 - TAXATION OF CROSS-JURISDICTIONAL TRANSACTIONS 3 credits.

An introduction to international and multistate tax issues. Topics covered may include tax treaties, foreign tax credit provisions, Subpart F rules, multistate apportionment, nexus, sales tax, and use tax. Enroll Info: None Requisites: ACCT I S 620
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2020

## 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 Enroll Info: None

Requisites: ACCT I S 620 and 621
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ACCT I S 730 - ADVANCED ASSURANCE SERVICES

3 credits
Operational and information systems auditing; risk analysis, electronic evidence; computerized audit and assurance techniques; internal auditing and outsourcing; analytical techniques; auditor judgment; control concepts, business process risk analysis; reporting on controls and business processes; expanding technology and assurance. Enroll Info: None

Requisites: ACCT I S 630 and (ACCT I S 340 or INFO SYS 320)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 (CAATTs), fraud, and other related topics. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## ACCT I S 765 - CONTEMPORARY TOPICS

1-4 credits
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

ACCT I S 770 - SEMINAR IN FINANCIAL REPORTING THEORY 3 credits.

Intensive study and critical examination of accounting and financial reporting theories, concepts and standards; evaluations of the pronouncements of accounting standard-setters and financial reporting regulators. Enroll Info: None
Requisites: ACCT I S 302 or 702
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ACCT I S 771 - SEMINAR IN STRATEGIC COST MANAGEMENT AND PERFORMANCE MEASUREMENT <br> 3 credits.

Development and analysis of accounting data for managerial planning, control, decision-making, and costing. Integration of financial and nonfinancial information needs for various managerial functions. Enroll Info: Graduate standing and Acct IS 710 or equivalent
Requisites: Graduate standing or Law professional
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ACCT I S 772 - SEMINAR IN CURRENT TAXATION TOPICS

3 credits.
Readings and cases in taxation; analysis and integration of related tax provisions and taxpayer impact. Enroll Info: None
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
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 nonfinancial 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. Enroll Info: None
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 intersession periods. Enroll Info: None
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. Enroll Info: None
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 2020

## ACCT I S 990 - ACCOUNTING INDEPENDENT RESEARCH PHD THESIS

 1-12 credits.Individual work to complete dissertation requirement of Ph.D. program. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, or STAT/MATH 431) or declared in Capstone Certificate in Actuarial Science, member of Business Exchange program. Not open to graduate students Repeatable for Credit: Yes, for 2 number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (MATH 303 or concurrent enrollment) or declared in Capstone Certificate in Actuarial Science or member of Business Exchange program. Not open to graduate students
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 222 or 276 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## ACT SCI 365 - CONTEMPORARY TOPICS

1-3 credits.
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: MATH 303 and (STAT/MATH 309, STAT 311, or STAT/
MATH 431); or member of 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 2020

## 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. Enroll Info: None
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 2020

## ACT SCI 652 - LOSS MODELS I

3 credits.
Definition and selection of probability distributions appropriate for insurance data that are heavily tailed and skewed. Enroll Info: None Requisites: (STAT/MATH 310 or STAT 312 or concurrent registration) or member of 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: Fall 2020
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. Enroll Info: None
Requisites: ACT SCI 652 or member of 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 2020

## 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. Enroll Info: None
Requisites: Junior standing and (GEN BUS 306, 704, STAT/MATH 310, or STAT 312); or member of 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 2020

## 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. Enroll Info: None
Requisites: Junior standing and (GEN BUS 306, 704, STAT/MATH 310, or
STAT 312); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2020

## ACT SCI 765 - CONTEMPORARY TOPICS

1-3 credits.
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of 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 creditsAn 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, students will also gain an overview of 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. Enroll Info: None
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
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. Enroll Info: None
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. Enroll Info: None
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 2020

AFRICAN 202 - INTRODUCTORY TOPICS IN AFRICAN CULTURAL STUDIES
3 credits.
An introductory discussion-based course on 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. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

AFRICAN 203 - INTRODUCTORY TOPICS IN AFRICAN LITERATURE 3 credits

Introduction to a special topic in African literature, focused on a specific region or genre. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

## AFRICAN 204 - INTRODUCTORY TOPICS IN AFRICAN LANGUAGES

 3 creditsSpecial 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. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## AFRICAN 211 - THE AFRICAN AUTOBIOGRAPHY

3 credits.
The importance of autobiography in depicting social change in the lives of Africans. Enroll Info: So st or cons inst
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: Fall 2012
AFRICAN 212 - INTRODUCTION TO AFRICAN POPULAR CULTURE 3 credits.

This course will use aspects of popular culture (such as popular literature, music, television, news media, movies, etc.) to introduce students to the African continent and its cultures, people, and languages. Students will be exposed to a variety of texts from different regions on the continent, learning about differences and similarities across the continent at the level of aesthetics and context. Enroll Info: None
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 2020
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. Enroll Info: None
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.
This course 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 boarders 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. Students will develop a familiarity with youth culture and politics in Senegal and study the ongoing process of cross-cultural flows and hybridity. Enroll Info: None
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. Enroll Info: None
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 2014
AFRICAN 231 - INTRODUCTION TO ARABIC LITERARY CULTURE 3 credits.

Survey course on Arabic cultural production. Through the course, students will develop a historic and critical understanding of Arabic literary traditions, as well as related musical and visual arts, up to the twenty-first century. Enroll Info: None
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 2015

## AFRICAN 232 - INTRODUCTION TO SWAHILI CULTURES

## 3 credits.

A multi-disciplinary perspective on the identities, history, language, literature, and artistic heritage of Swahili speakers. Enroll Info: None 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.Can HipHop culture help produce a more just world? If so, what theory and praxis best advance this aim? These are the questions that drive this conceptual course. Our critical interrogation of the relationship between HipHop and social justice considers the culture from its U.S. Black Power era underpinnings to its disparate contemporary "glocal" manifestations. We begin by asking what is "HipHop," what is "social justice," and what is their relationship, and proceed to consider how HipHop can be an effective force for social justice and what obstacles mitigate against this potential. These 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. Weekly readings will typically pair writings specifically on HipHop with theory from across the humanities and social sciences including philosophy, sociology, cultural studies, and political economy. We will endeavor to consider the race/class/gender dimensions of our weekly topics. Students will acquire a broader familiarity with HipHop activism, and develop new conceptual tools and critical thinking skills. Enroll Info: None
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 2020

## AFRICAN/FOLKLORE 270 - THE HERO AND TRICKSTER IN AFRICAN ORAL TRADITIONS <br> 3 credits.

Two major characters in African oral tradition as treated in narrative, epic and heroic poetry. Enroll Info: None
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: No
Last Taught: Fall 2014
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. Enroll Info: None

## 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: Fall 2020

## 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. Enroll Info: None
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 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. Enroll Info: Open to Fr with cons inst. Not recommended for grad stdts
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: Spring 2020

## AFRICAN/INTL ST 302 - ARABIC LITERATURE AND CINEMA

3 credits.

An introduction of the most significant topics of contemporary Arabic literature and cinema: the legacy of colonialism, repressive nature of post-independence regimes, discourses on nationalism, religion $v$. secularization, gender relations, representation of cultural otherness, and the Arab Springs. Course 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. That said, I would be cautious about understanding this course as a comprehensive "survey" of Arabic literature and cinema: it is more accurately a "sampling." And because these books and films, and their cultures are fairly unfamiliar, we will move slowly through them, taking time to reflect on our own process of reading. Enroll Info: None
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

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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## AFRICAN 325 - COLLOQUIAL ARABIC

2 credits.
Enroll Info: AFRICAN 321322 or equiv
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 2018
AFRICAN 326 - COLLOQUIAL ARABIC
2 credits.
Enroll Info: AFRICAN 325
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 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: If students have not completed the prerequisite course but have prior experience with Swahili, they should contact the department for placement.
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 2020

## AFRICAN 333 - THIRD SEMESTER SWAHILI

## 4 credits.

Continuation of AFRICAN 332. Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice. Enroll Info: None
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 2020

## AFRICAN 334 - FOURTH SEMESTER SWAHILI

4 credits.
Continuation of 333. Enroll Info: AFRICAN 333 or cons inst
Requisites: None
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

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. Enroll Info: None
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 2016

AFRICAN 336 - SECOND SEMESTER-A LANGUAGE OF SOUTHERN AFRICA
4-5 credits.
Continuation of 335. Enroll Info: AFRICAN 335 or cons inst. 4 cr for Grads,
4 cr for Undergrads (4 cr only Summer). Open to Fr
Requisites: None
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 2017
AFRICAN 337 - THIRD SEMESTER-A LANGUAGE OF SOUTHERN AFRICA 4 credits.

Continuation of 336; More advanced speaking knowledge and grammatical analysis. Structure, reading, drills. Enroll Info: AFRICAN 336 or cons inst
Requisites: None
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.
Continuation of 337. Enroll Info: AFRICAN 337 or cons inst
Requisites: None
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.
For beginning learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading and writing, and on communication in cultural context. Taught intensively in the summer as part of the Arabic, Persian and Turkish Language Institute (APTLI). Enroll Info: None
Requisites: Admitted to Summer Immersion Language Institute (SILI)
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 2020

## AFRICAN 340 - SECOND SEMESTER SUMMER ARABIC

4 credits.
For beginning learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, ready and writing, and on communication in cultural context. Taught intensively in the summer as part of the Arabic, Persian and Turkish Language Institute (APTLI). Continuation of First Semester Summer Arabic (AFRICAN 339). Enroll Info: None
Requisites: Admitted to Summer Immersion Language Institute (SILI)
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

## AFRICAN 341 - THIRD SEMESTER SUMMER 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. Taught intensively in the summer as part of the Arabic, Persian and Turkish Language Institute (APTLI). Enroll Info: None
Requisites: Admitted to Summer Immersion Language Institute (SILI)
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 2020

## AFRICAN 342 - FOURTH SEMESTER SUMMER 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. Taught intensively in the summer as part of the Arabic, Persian and Turkish Language Institute (APTLI). Continuation of Third Semester Summer Arabic (AFRICAN 341). Enroll Info: None
Requisites: Admitted to Summer Immersion Language Institute (SILI)
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 2020

## AFRICAN 343 - FIFTH SEMESTER SUMMER ARABIC

4 credits.
For advanced learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context. Taught intensively in the summer as part of the Arabic, Persian and Turkish Language Institute (APTLI). Enroll Info: None
Requisites: Admitted to Summer Immersion Language Institute (SILI)
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Summer 2020
AFRICAN 344 - SIXTH SEMESTER SUMMER ARABIC
4 credits.
For advanced learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context. Taught intensively in the summer as part of the Arabic, Persian and Turkish Language Institute (APTLI). Continuation of Fifth Semester Summer Arabic (AFRICAN 343). Enroll

## Info: None

Requisites: Admitted to Summer Immersion Language Institute (SILI)
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
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.
Continuation of 361. Enroll Info: AFRICAN 361 or cons inst. 4 cr for Grads, 5 cr for Undergrads ( 4 cr only Summer). Open to Fr
Requisites: None
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. Enroll Info: 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. Enroll Info: None
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 2020
AFRICAN 372 - SECOND SEMESTER YORUBA
5 credits.
Continuation of AFRICAN 371. For beginning learners of standard Yoruba; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context. Enroll Info: None
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 2020
AFRICAN 373 - THIRD SEMESTER YORUBA
4 credits.
Advanced grammar and conversational practice. Reading contemporary Yoruba literature and other writings. Enroll Info: AFRICAN 372 or cons inst Requisites: None
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

## AFRICAN 374 - FOURTH SEMESTER YORUBA

4 credits.
Continuation of AFRICAN 373, intended to continue to develop and refine competence and performance in linguistic skills that were developed in the first three semesters of Yoruba courses. Enroll Info: None
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 2018
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. Enroll Info: None
Requisites: None
Course Designation: Frgn Lang - 1 st 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.Continuation of 391. Enroll Info: AFRICAN 391 or cons inst. 4 cr for Grads, 5 cr for Undergrads (4 cr only Summer). Open to Fr
Requisites: None
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.

Continuation of 391 and 392. Enroll Info: AFRICAN 392 or cons inst
Requisites: None
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.
Continuation of 393. Enroll Info: AFRICAN 393 or cons inst
Requisites: None
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. Enroll Info: AFRICAN/INTL ST 302 cons inst
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. Enroll Info: AFRICAN 201 or 210 or 211 , or Grad st, or cons inst
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
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.This course is a study of the many ways of understanding the entire spectrum of culture and cultural production, circulation, consumption, and meaning making in Africa. It foregrounds material and imaginative cultural forms and practices-their origins, languages, contents, forms, functions, genres, audiences-as well as how these have been conceived and theorized by practitioners and scholars in the context of Africa and the world. The course will also examine 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. This is what "theory of African cultural studies" means in its most robust and imaginative senses. We will survey the entrenched modes of both conceptual and critical apprehension of the cultural forms and practices (from Negritude to postcolonialism and postmodernism), explore their methods of reading, raise the issue of their linkages to sources in Euro-America, and assess 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. Enroll Info: None
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

## AFRICAN 405 - TOPICS IN AFRICAN CULTURAL STUDIES

3 credits.
This course 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: 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. Enroll Info: None
Requisites: Must have graduate standing or have taken AFRICAN 201 or 301.

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.This course will introduce students to the phenomenon of "musical blackness" as a US-based, transnational cultural form and practice. In each class (topics will vary), students will learn about 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. By giving close consideration to genre, style, and performance practice, the course will help students to understand the many ways in which musical sound and social/political ideas are inextricably linked. Enroll Info: None

## 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 2020

AFRICAN 412 - CONTEMPORARY AFRICAN FICTION
3-4 credits.
A critical study of the major works. Enroll Info: Jr st or cons inst 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
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. Enroll Info: None
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: Fall 2015
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. Enroll Info: None
Requisites: None
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

## 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. Enroll Info: None
Requisites: None
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 2018

## AFRICAN/FRENCH 440 - AFRICAN/FRANCOPHONE FILM

3 credits.
Studies the construction of narratives in cinema and literature; teaches to analyze and write about cinema; explores links between cinema and national or regional politics and ideology; examines spectatorship in relation to questions of identity formation. Enroll Info: FRENCH 271
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: Spring 2019

## AFRICAN 445 - ADVANCED READINGS IN ARABIC TEXTS

3 credits.
A selection of Arabic texts, ranging from Classical to modern, depending upon that semester's cultural topic. Enroll Info: None
Requisites: AFRICAN 330
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. Enroll Info: Portuguese 221 311/312 or cons inst
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

## AFRICAN 453 - MODERN AFRICAN LITERATURE IN ENGLISH

 3-4 credits.Chief emphasis on modern African poetry, novel, drama, and short story.
Enroll Info: None
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement Repeatable for Credit: No
Last Taught: Fall 2015
AFRICAN/FOLKLORE 471 - ORAL TRADITIONS AND THE WRITTEN WORD
3-4 credits.
Analyses and comparisons of African oral narrative-performances and African written literatures. Enroll Info: AFRICAN/FOLKLORE 210, 402, or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## AFRICAN 475 - FIFTH SEMESTER YORUBA

3 credits.
Advanced linguistic structures, literature and poetry. Introduction to Yoruba cultures in the works of Wole Soyinka. Enroll Info: AFRICAN 374 or cons inst
Requisites: None
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. Enroll Info: AFRICAN 475 or cons inst 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: Spring 2016

AFRICAN 493 - FIFTH SEMESTER, A LANGUAGE OF SOUTHERN AFRICA 3 credits.

Advanced linguistic structures and literature. Enroll Info: AFRICAN 338 or cons inst
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: Fall 2013
AFRICAN 494 - SIXTH SEMESTER, A LANGUAGE OF SOUTHERN AFRICA 3 credits.

Advanced linguistic structures and literature. Enroll Info: AFRICAN 493 or cons inst
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 2013

## AFRICAN 495 - FIFTH SEMESTER, A LANGUAGE OF NORTHERN AFRICA

3 credits.
Advanced linguistic structures and literature. Enroll Info: African 368 or cons inst
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: Fall 2017

AFRICAN 496 - SIXTH SEMESTER, A LANGUAGE OF NORTHERN AFRICA 3 credits.

Advanced linguistic structures and literature. Enroll Info: AFRICAN 495 or cons inst
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 2017
AFRICAN 498 - SIXTH SEMESTER, A LANGUAGE OF WEST AFRICA
3 credits.
Advanced linguistic structure and literature. Enroll Info: African 497 or cons inst
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 2012

## AFRICAN 500 - LANGUAGE AND SOCIETY IN AFRICA

3-4 credits
Language use in African societies; multilingualism; language in politics, religion, socialization. Enroll Info: None
Requisites: None
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 501 - STRUCTURE AND ANALYSIS OF AFRICAN LANGUAGES 3-4 credits.

Emphasis on phonetics (including transcription), and on theories and problems of phonology, morphology, and syntax. Enroll Info: African 301 for Undergrads; none for Grads
Requisites: None
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 2014

## AFRICAN 503 - AFRICAN LINGUISTIC STRUCTURES-MORPHOLOGY AND SYNTAX <br> 3-4 credits.

Morphological and syntactic characteristics of various African languages, with emphasis on noun-class systems, pluralization, verbal systems and word formation. Enroll Info: AFRICAN 501 or cons inst
Requisites: None
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 2013

## AFRICAN 605 - ADVANCED TOPICS IN AFRICAN CULTURAL STUDIES

 3 credits.This course will introduce students to foundational texts in the study of modern Africa and the social, political, and economic contexts of the continent's cultural production and productivity. We will organize our conceptual explorations around such interesting issues 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. This course will encourage students to think about 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. The course will promote critical thinking by challenging students to put like and unlike texts together and pay attention to rhetoric and implied meanings, all in the context of Africa's interactive history with the world in the modern era. Enroll Info: None 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 2020

## AFRICAN 606 - ADVANCED TOPICS IN AFRICAN LITERATURE

 3 credits.A critical and historical study of selected topics in African literary studies. Enroll Info: None
Requisites: Senior 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.This course will examine key critical concepts in the cultural study of racially specified "black music" as it has developed as a global phenomenon. Typically organized as a seminar, the course will pair 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. This pairing will provide the means by which students will develop critical skills for undertaking cultural music analysis. Throughout the semester, students will be encouraged to think about 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. Enroll Info: None
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: Fall 2017

## AFRICAN 669 - SPECIAL TOPICS

3 credits.

## Enroll Info: None

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: 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. Each student will 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). Intended for those with prior experience in the study of African languages, or advanced study of other foreign languages. Enroll Info: None
Requisites: Graduate/professional standing and concurrent enrollment in AFRICAN 671
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## AFRICAN 671 - MULTILANGUAGE SEMINAR

4 credits.
Through weekly meetings, students discuss their use of self-instructional methods to learn a less commonly taught language (LCTL), get feedback on individualized syllabi and assessment plans, and present progress reports orally and in writing. Homework includes continuous selfinstruction in the chosen LCTL including reading, writing, oral, and listening skills; work with a conversation partner; and cultural knowledge. Enroll Info: None
Requisites: Graduate/professional standing and AFRICAN 670 or concurrent enrollment
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
AFRICAN 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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

## AFRICAN 682 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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

## AFRICAN 697 - DIRECTED STUDY OF A LESS COMMONLY TAUGHT LANGUAGE <br> 3-5 credits.

Monitored self-instruction of a less commonly taught language. Students will meet 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 selfassessments. Enroll Info: Must be taken concurrently with AFRICAN 670 during the first enrollment.
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 2017
AFRICAN 698 - DIRECTED STUDY
1-6 credits.
Enroll Info: Graded on a $\mathrm{Cr} / \mathrm{N}$ basis; requires consent of instructor and 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: No

## AFRICAN 699 - DIRECTED STUDY

1-6 credits.
Enroll Info: Graded on a lettered basis; requires cons inst and Jr or Sr st
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: Summer 2020
AFRICAN 700 - READING AND WRITING AFRICAN CULTURAL STUDIES
3 credits.
This is a course on academic writing, designed to guide graduate students toward a full understanding of the craft of marshaling evidence to support an argument in the humanities, particularly African cultural studies. It covers the norms and expectations that inhere in academic writing as well as the mechanics of producing original scholarship. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## AFRICAN 701 - ADVANCED TOPICS IN AFRICAN LINGUISTICS

 3 credits.Advanced study of a topic in African linguistics. Content will vary with each offering. Enroll Info: Sr major or Grad cons inst
Requisites: 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 702 - AFRICAN VERBAL STYLISTICS

3 credits.
Linguistic approaches to the vrbl arts of Africa, oral, written, and in performance. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## 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. Enroll Info: None
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

## AFRICAN 704 - TOPICS IN AFRICAN CULTURAL STUDIES PEDAGOGY

 1 credit.This course is an exploration of key thematics in the teaching and understanding of African cultural studies. It is organized centrally around methodology and pedagogy: what is, how we know, name, and categorize; and how we teach, analyze, and communicate. Enroll Info: None 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.
This course will develop graduate students' 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. Designed for students who teach foreign languages but open to graduate students in other humanities disciplines. Enroll Info: None
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. Enroll Info: None
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, students will be trained to reflect critically on the ongoing conversation about cultural production and literary criticism in the context of African studies. Enroll Info: None 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.

This course is a study of the many ways of understanding the entire spectrum of culture and cultural production, circulation, consumption, and meaning making in Africa. It foregrounds material and imaginative cultural forms and practices-their origins, languages, contents, forms, functions, genres, audiences-as well as how these have been conceived and theorized by practitioners and scholars in the context of Africa and the world. The course will also examine 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. This is what "theory of African cultural studies" means in its most robust and imaginative senses. We will survey the entrenched modes of both conceptual and critical apprehension of the cultural forms and practices (from Negritude to postcolonialism and postmodernism), explore their methods of reading, raise the issue of their linkages to sources in Euro-America, and assess 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Participants will 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 from other class participants. Enroll Info: None 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: Fall 2020

## AFRICAN/AFROAMER 813 - CONTEMPORARY AFRICAN AND CARIBBEAN DRAMA <br> 3 credits.

Historical and critical study of the classics of contemporary African and Caribbean literary drama written in English. We will organize our survey around such interesting thematic issues as 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. We will also read theories and critical approaches to understanding the cross-continental drama traditions and their contexts. This course will encourage students to think about 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. The course will promote critical thinking by challenging students to question conventional claims made by others and their own assumptions; it will invite students to think through the perspectives of others with empathy and respect, and stimulate analytical thinking about identity. Writers to be studied include Wole Soyinka, Derek Walcott, Aime Cesaire, Ama Ata Aidoo, Femi Osofisan, Sindiwe Magona, Mustapha Matura, and the Sistren Theatre Collective. Enroll Info: None
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. Enroll Info: None
Requisites: 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
AFRICAN 902 - SEMINAR IN TRADITIONAL AFRICAN LIT 3 credits.

Topics in oral art forms. Enroll Info: None
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 2012

## AFRICAN 903 - SEMINAR IN AFRICAN LINGUISTICS

3 credits
Enroll Info: None
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 2012
AFRICAN 905 - SEMINAR IN AFRICAN CULTURAL STUDIES: TOPICS 3 credits.

This seminar 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. Enroll Info: None
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

## AFRICAN 926 - SEMINAR IN RESEARCH METHODS IN AFRICAN CULTURAL STUDIES <br> 3 credits.

Field methods, techniques, and analytical approaches for students doing research in African cultural studies. Topics vary but may include ethnography, narrative analysis, critical discourse analysis, and other research methods. Enroll Info: None
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

## AFRICAN/ANTHRO/ECON/GEOG/HISTORY/POLI SCI 983 -

 INTERDEPARTMENTAL SEMINAR-AFRICAN STUDIES 3 credits.Interdisciplinary inquiry in African society and culture. Enroll Info: None
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

## AFRICAN 990 - THESIS

1-9 credits.
Enroll Info: None
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

## AFRICAN 999 - INDEPENDENT READING AND RESEARCH

1-3 credits.
Enroll Info: None
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

## AFRO-AMERICAN STUDIES <br> (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. Enroll Info: None
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 2020

## AFROAMER 151 - INTRODUCTION TO CONTEMPORARY AFRO-

 AMERICAN SOCIETY3 credits.
Survey of the characteristics and problems of Afro-Americans in contemporary society. Enroll Info: None
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 2020
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. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: Freshman and sophomore standing only
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 2019

## AFROAMER 156 - BLACK MUSIC AND AMERICAN CULTURAL HISTORY

 3 credits.This course examines the interaction between Afro-American musical culture and its historical context, with an emphasis on the period from 1920 to the present. Enroll Info: None
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 2020

## AFROAMER 199 - DIRECTED STUDY

1-3 credits.

## Enroll Info: None

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 2014

## AFROAMER/AFRICAN 220 - HIPHOP, YOUTH CULTURE, AND POLITICS

 IN SENEGAL3 credits.

This course 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 boarders 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. Students will develop a familiarity with youth culture and politics in Senegal and study the ongoing process of cross-cultural flows and hybridity. Enroll Info: None
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

## AFROAMER/GEN\&WS 221 - INTRODUCTION TO BLACK WOMEN'S STUDIES <br> 3 credits.

This course will provide students with an overvview of the field of Black women's studies. Enroll Info: None
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 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. Enroll Info: None
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 2020

## AFROAMER 225 - INTRODUCTION TO AFRICAN AMERICAN DRAMATIC LITERATURE <br> 3 credits.

Introduction to the history of African American theater and major African American playwrights and actors. Enroll Info: First yr stdts only
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 2020
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. Enroll Info: Open to Fr and So only
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 2020

## 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. Enroll Info: None
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 2020
AFROAMER/AFRICAN 233 - GLOBAL HIPHOP AND SOCIAL JUSTICE 3 credits.

Can HipHop culture help produce a more just world? If so, what theory and praxis best advance this aim? These are the questions that drive this conceptual course. Our critical interrogation of the relationship between HipHop and social justice considers the culture from its U.S. Black Power era underpinnings to its disparate contemporary "glocal" manifestations. We begin by asking what is "HipHop," what is "social justice," and what is their relationship, and proceed to consider how HipHop can be an effective force for social justice and what obstacles mitigate against this potential. These 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. Weekly readings will typically pair writings specifically on HipHop with theory from across the humanities and social sciences including philosophy, sociology, cultural studies, and political economy. We will endeavor to consider the race/class/gender dimensions of our weekly topics. Students will acquire a broader familiarity with HipHop activism, and develop new conceptual tools and critical thinking skills. Enroll Info: None
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 2020

## AFROAMER/ART HIST 241 - INTRODUCTION TO AFRICAN ART AND ARCHITECTURE

3 credits.
This course 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 21 st century and thematic/cultural case studies: artists and aesthetics; textiles, decorative, and personal/body arts; architecture; and individual artists. Enroll Info: None
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

## AFROAMER/ART HIST 242 - INTRODUCTION TO AFRO-AMERICAN ART

3 credits.
Historical survey of Afro-American art. Beginning with the African heritage and concluding with creativity of the 1970's, it examines the evolution of Afro-American art. Attention to the aesthetic sensibilities of diverse styles as well as the social significance of Black art within the art arena. Enroll Info: None
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 2020
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. Enroll Info:

## None

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: Summer 2020

## AFROAMER 265 - AFRICAN-AMERICAN AUTOBIOGRAPHY

 3 credits.Autobiographies of major Afro-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. Enroll Info: Freshman or Sophomore status for the honors offering 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2014

## AFROAMER 271 - SELECTED TOPICS IN AFRICAN AMERICAN CULTURE

3 credits.
Introductory level course on specific topics in African American culture.
Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

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, 1932present. Focus on origins and accomplishments of "the Second Reconstruction"; Black Power and white backlash; contemporary racial politics and issues. Enroll Info: None
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 2020

AFROAMER/HIST SCI/MED HIST 275 - SCIENCE, MEDICINE, AND RACE:

## A HISTORY

3 credits.
Surveys the medical and scientific constructions of categories of race, placing the development of racial theories in a broad social and political context. The course will pay particular attention to the importance of racial science in slavery and colonialism. Enroll Info: None
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 2018
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. Enroll Info: None 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: Fall 2020
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. Enroll Info: None
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 2018
AFROAMER 302 - UNDERGRADUATE STUDIES IN AFRO-AMERICAN
HISTORY
3 credits.
In-depth treatment of a key theme in black historical studies. Enroll Info: None
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 2020

AFROAMER 303 - BLACKS, FILM, AND SOCIETY
3 credits.
Study of the interpretations of the Afro-American past conveyed via theatrical films and television; relationship to other images of blacks found throughout the popular culture; relationship to societal trends. Enroll Info: So st
Requisites: None
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
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info:

## None

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. Enroll Info: So st
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. Enroll Info: So st
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 2020

## 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.

## Enroll Info: None

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 2020
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. Enroll Info: None
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: Fall 2015

## 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. Enroll Info: None
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: Fall 2020

## AFROAMER/HISTORY 347 - THE CARIBBEAN AND ITS DIASPORAS

 3 credits.Major topics in the history of Caribbean societies from the European conquest to the present. Emphasis on colonial rule, slavery, and the diaspora communities created by Caribbean peoples in the United States and Europe. Enroll Info: None
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 2018
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. Enroll Info: None
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 2018

## AFROAMER/HISTORY 393 - SLAVERY, CIVIL WAR, AND <br> 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. Enroll Info: None
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 2020
AFROAMER/MUSIC 400 - MUSIC CULTURES OF THE WORLD: AFRICA, EUROPE, THE AMERICAS
3 credits.
Explores the performance, transmission, and consumption of traditional and popular musics of Africa, Europe, and the Americas. Employs
musical-analytic and critical approaches to trace transnational musical
circulation. Enroll Info: None
Requisites: MUSIC 212
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 2011

## 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. Enroll Info: None
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
AFROAMER/AFRICAN 413 - CONTEMPORARY AFRICAN AND CARIBBEAN DRAMA
3-4 credits.
A critical study of the major works. Enroll Info: None
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: Fall 2015

## AFROAMER/ASIAN AM 443 - MUTUAL PERCEPTIONS OF RACIAL MINORITIES <br> 3 credits.

Survey course on the mutual perceptions of primarily people of African and Asian ancestry. It focuses on how these groups evaluate perceive and interact with one another and others such as Native Americans, whites and Hispanics. Social psychological perspectives are highlighted as is an international overview. Enroll Info: Afro-Amer 151 or 673

## Requisites: None

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 2019

## AFROAMER 456 - SOUL MUSIC AND THE AFRICAN AMERICAN FREEDOM MOVEMENT <br> 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. Enroll Info: None
Requisites: Sophomore 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: Fall 2016

## AFROAMER 469 - INTERDISCIPLINARY STUDIES IN THE ARTS

1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None
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 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. Enroll Info: Junior standing 3 credits intermediate literature Requisites: None
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 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. Enroll Info: None
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\&S Credit - Counts 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
AFROAMER/HDFS 521 - AFRICAN AMERICAN FAMILIES
3 credits.
Historical background; variations in contemporary family patterns; courtship and marriage, reproduction, and socialization stresses; "culture of poverty" theories; sources of stability and change. Enroll Info: None 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
Last Taught: Summer 2011

## AFROAMER/HIST SCI/MED HIST 523 - RACE, AMERICAN MEDICINE AND PUBLIC HEALTH

3 credits.

The course will provide historical perspectives on current dilemmas facing black patients and health care professionals. Enroll Info: Jr or Sr st
Requisites: None
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 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.
Enroll Info: Junior standing minimum of 2 courses in literature
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: Fall 2019
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. Enroll Info: None
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 2015
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. Enroll Info: None
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 2013

## AFROAMER/GEN\&WS 625 - GENDER, RACE AND THE CIVIL RIGHTS MOVEMENT <br> 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. Enroll Info: None
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 2018
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. Enroll Info: None 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 2020

## AFROAMER 631 - COLLOQUIUM IN AFRO-AMERICAN HISTORY

3 credits.
Readings, discussion, and research seminar for advanced students in
Afro-American History. Enroll Info: Jr or Sr st
Requisites: None
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/ART HIST 643 - SELECTED TOPICS IN AFRICAN DIASPORA ART HISTORY <br> 3 credits.

Art history of a specific African cultural tradition (eg. Yoruba, Kongo, Fon, Akan) and its transformation in the Caribbean, Central and South America in response to new social, historical, and hegemonic forces. Enroll Info: Afro-Amer 241, 242, 243 or consent of instructor
Requisites: Afro-American Studies 241 or Afro-American Studies 242 required.
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: Fall 2012

AFROAMER 669 - INTERDISCIPLINARY STUDIES IN THE ARTS
1-4 credits.
Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None
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: Fall 2016

AFROAMER 671 - SELECTED TOPICS IN AFRO-AMERICAN HISTORY 3 credits.

An intensive analysis of specific themes in the Black American experience. Subjects vary with the instructor. Enroll Info: None 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: Fall 2020

## 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. Enroll Info: None
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 2020

## AFROAMER 673 - SELECTED TOPICS IN AFRO-AMERICAN SOCIETY

 3 credits.An intensive analysis of specific themes in the Afro-American experience. The subjects vary with the instructor. Enroll Info: Jr st
Requisites: None
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 2020
AFROAMER/ART 674 - SELECTED TOPICS ON AFRO-AMERICAN ARTISTS
3 credits.
Works of Black artists in the U.S. discussed historically in terms of movements which they created and in terms of trends evolving on an international scale. Jr st and cons inst. Enroll Info: None

## Requisites: Consent of instructor

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: Yes, unlimited number of completions
Last Taught: Fall 2012

## AFROAMER 675 - SELECTED TOPICS IN AFRO-AMERICAN CULTURE

3 credits.

An intensive analysis of specific themes in the Afro-American experience.
Enroll Info: Varies with topic
Requisites: None
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: Fall 2020

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. Enroll Info: None
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 2017

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. Enroll Info: None
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.
Enroll Info: Hon candidates cons inst
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.

Enroll Info: Hon candidates cons inst
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.
Enroll Info: None
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.

Enroll Info: None
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.Enroll Info: Graded on a lettered basis; requires cons inst
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 2020
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. Enroll Info: None
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.
Enroll Info: Masters st and cons inst
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
AFROAMER/ART HIST 801 - HISTORIOGRAPHY, THEORY AND METHODS IN VISUAL CULTURE
3 credits.
Prepares student for graduate work in the transdisciplinary study of Visual Cultures by building on the knowledge, theories, and methods that are fundamental to the discipline. It will develop skills in critical reading, research, analysis, writing, and oral presentation. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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

## 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. We will organize our survey around such interesting thematic issues as 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. We will also read theories and critical approaches to understanding the cross-continental drama traditions and their contexts.This course will encourage students to think about 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. The course will promote critical thinking by challenging students to question conventional claims made by others and their own assumptions; it will invite students to think through the perspectives of others with empathy and respect, and stimulate analytical thinking about identity. Writers to be studied include Wole Soyinka, Derek Walcott, Aime Cesaire, Ama Ata Aidoo, Femi Osofisan, Sindiwe Magona, Mustapha Matura, and the Sistren Theatre Collective. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement

## Repeatable for Credit: No

## AGRICULTURAL AND APPLIED <br> 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. Enroll Info: 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 <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 geoengineering; integrated assessment; environmental implications of energy use; climate change impacts on land use. Use of economic analysis and modeling for public policy design. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## A A E/ECON/REAL EST/URB R PL 306 - THE REAL ESTATE PROCESS 3 credits.

Introductory survey course. Decision-making processes for the manufacture, marketing, management and financing of real estate space. Survey of institutional context, economics of urbanization, historical pattern and structure of city growth, and public policy issues regarding urban environment and business management. Enroll Info: None Requisites: Sophomore standing and (ECON 101 or 111) or member of 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: Fall 2020

## 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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 111
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## A A E 320 - FARMING SYSTEMS MANAGEMENT

3 credits.
Methods of economic analysis, planning and management applied to conventional and alternative farming systems. Enroll Info: None
Requisites: A A E 215, ECON 101, or 111
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E 322 - COMMODITY MARKETS

3 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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 111
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: SOC/C\&E SOC 140, 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 2020

## A A E/ECON/ENVIR ST 343 - ENVIRONMENTAL ECONOMICS <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E/AGRONOMY/INTER-AG/NUTR SCI 350 - WORLD HUNGER AND MALNUTRITION <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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 heath challenges; understand the causes and consequences of health discrepancies; evaluate health and environmental policies; and appreciate the interconnectedness of planetary health and economic outcomes. Enroll Info: None
Requisites: 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: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## A A E 375 - SPECIAL TOPICS

1-4 credits.
Special topics on contemporary issues relevant to agricultural and applied economics. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2019

## 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. Enroll Info: None
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 2020

## A A E 400 - STUDY ABROAD IN AGRICULTURAL AND APPLIED ECONOMICS <br> 1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Enroll Info: 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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 111
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: STAT 301, 371, ECON 310, 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E/ECON 473 - ECONOMIC GROWTH AND DEVELOPMENT IN SOUTHEAST ASIA <br> 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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## A A E/ECON 477 - AGRICULTURAL AND ECONOMIC DEVELOPMENT IN AFRICA <br> 3 credits. <br> Composition, organization, and techniques of agricultural production; economic change and development of agriculture, economic policies, special problems of developing African agriculture. Enroll Info: None <br> Requisites: A A E 215, ECON 101, or 111, or graduate/professional standing <br> Course Designation: Breadth - Social Science <br> Level - Intermediate <br> L\&S Credit - Counts as Liberal Arts and Science credit in L\&S <br> Grad 50\% - Counts toward 50\% graduate coursework requirement <br> Sustain - Sustainability <br> Repeatable for Credit: No <br> Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Senior standing and (declared in Agricultural \& Applied
Economics, B.S. or Agricultural Business Management, B.S.)
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## A A E/ECON 526 - QUANTITATIVE METHODS IN AGRICULTURAL AND APPLIED ECONOMICS <br> 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## A A E/M HR 540 - INTELLECTUAL PROPERTY RIGHTS, INNOVATION AND TECHNOLOGY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing and (ECON 301 or 311)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 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/ECON 567 - PUBLIC FINANCE IN LESS DEVELOPED COUNTRIES 3 credits.

Potential and limitations of fiscal policy as a development instrument in low-income countries; tax harmonization in economic integration; case studies in tax reform; budgeting and planning. Enroll Info: Introductory course in economic theory, public finance or economic development recommended.
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 2012

## A A E 575 - SPECIAL TOPICS

1-4 credits.
Special topics in Agricultural Economics at the intermediate level. Topics will vary from semester to semester. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2012

## 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. Enroll Info: 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 2019

## 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.. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E 637 - APPLIED ECONOMETRIC ANALYSIS II

3 credits.
Extension of the standard regression model is the primary focus. Topics: 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. Enroll Info: None
Requisites: A A E 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: A A E 635 and 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: A A E 635 and 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## A A E 643 - FOUNDATIONS OF ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS <br> 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.

## Enroll Info: None

Requisites: A A E 635 and 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## A A E/ENVIR ST/F\&W ECOL 652 - DECISION METHODS FOR NATURAL RESOURCE MANAGERS <br> 3-4 credits.

Applications of quantitative methods, including optimization and simulation, to the management of natural resources, especially forests.

## Enroll Info: None

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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
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 Sustain - Sustainability
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. Enroll Info: 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. Enroll Info: 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2014
A A E 692 - SENIOR THESIS
2 credits.
Individual study for majors completing theses for AAE degrees as arranged with a faculty member. Enroll Info: Requires consent of supervising instructor. Continuation of A A E 691.
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2015

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: 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. Enroll Info:

## None

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 2020

## 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. Enroll Info: None
Requisites: 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

## A A E 721 - PROFESSIONAL COMMUNICATION OF APPLIED ECONOMIC ANALYSIS <br> 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. Enroll Info: None
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 2020
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; treebased methods; neural networks; random forests and casual inference; and unsupervised learning. Enroll Info: None
Requisites: A A E 636 or ECON 704
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None Requisites: A A E 721
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: A A E 637
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E 729 - THE MICRODYNAMICS OF ENVIRONMENT AND DEVELOPMENT <br> 3 credits.

Explores the intersection of environmental and development economics using advanced theoretical and empirical models to examine rural conservation and development, technology adoption and diffusion, and the dynamics of investment behavior in the presence of imperfect capital markets. Enroll Info: Prior completion of ECON 711 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 2012

## 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. Enroll Info: None Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ECON 709 and 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E 741 - ADVANCED POLICY ANALYSIS

3 credits.
Economic efficiency and welfare at the micro and macro levels. Role of contracts and effects of policy instruments related to pricing and trade policy, under uncertainty. Role of technology and effects of globalization in developed and developing countries. Enroll Info: None
Requisites: ECON 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2011

## 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. Enroll Info: None
Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: None
Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## A A E 770 - INTRODUCTION TO QUANTITATIVE METHODS IN RESOURCE AND ENERGY ECONOMICS <br> 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in the Resource and Energy Demand Analysis program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## A A E 774 - PRACTICUM IN RESOURCE AND ENERGY DEMAND ANALYSIS I <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## A A E 776 - PRACTICUM IN RESOURCE AND ENERGY DEMAND ANALYSIS II <br> 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 courses is designed to reflect the full range of professional responsibilities of a resource/ energy demand analyst, from data retrieval/cleaning, to analysis, to reporting. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in the Resource and Energy Demand Analysis program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
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 2020

## A A E 799 - PRACTICUM IN AGRICULTURAL AND APPLIED ECONOMICS TEACHING <br> 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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## A A E 875 - SPECIAL TOPICS

1-4 credits
Special topics on contemporary issues relevant to agricultural and applied economics. Enroll Info: None
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

## 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. Enroll Info: None

Requisites: Graduate/professional standing and (PUB AFFR 818 and 880), or 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 2020

## A A E/ANTHRO/C\&E SOC/GEOG/HISTORY/LACIS/POLI SCI/PORTUG/ SOC/SPANISH 982 - INTERDEPARTMENTAL SEMINAR IN THE LATINAMERICAN AREA <br> 1-3 credits.

Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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

## A A E 990 - RESEARCH AND THESIS

1-12 credits.

Independent research and writing to complete dissertation requirement. Enroll Info: None

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

## A A E 999 - SPECIAL WORK - AGRICULTURAL AND APPLIED ECONOMICS <br> 1-3 credits.

Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## 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 wihin a broader context of dynamic social and ecological relationships. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## AGROECOL/AGRONOMY/DY SCI 371 - MANAGED GRAZING FIELD STUDY <br> 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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Cons inst
Requisites: Enrollment limited to Agroecology Majors. All others must seek instructor consent.
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## AGROECOL 710 - AGROECOLOGY SEMINAR

1 credit.
Weekly seminar on topics in agroecology. Enroll Info: None
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

## AGROECOL 720 - AGROECOLOGY FIELD STUDY

1-3 credits.
Field study of farms, processing, marketing, distribution, and policymaking 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY/BOTANY/ ENVIR ST 260) and (PHYSICS 103 or CHEM 103, 109 or 115); or graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## AGRONOMY/AGROECOL/C\&E SOC/ENTOM/ENVIR ST 103 AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE <br> 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 wihin a broader context of dynamic social and ecological relationships. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## AGRONOMY/ENTOM/NUTR SCI 203 - INTRODUCTION TO GLOBAL HEALTH <br> 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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## AGRONOMY 289 - HONORS INDEPENDENT STUDY

1-2 credits.

Research work under direct guidance of an Agronomy faculty or instructional academic staff member. Enroll Info: 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. Enroll Info: 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 2020

## 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Junior standing and (DY SCI/AN SCI 101, ZOOLOGY/ BIOLOGY 101, 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None
Requisites: (CHEM 103, 109, or 115 and 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## AGRONOMY/BOTANY/HORT 339 - PLANT BIOTECHNOLOGY:

 PRINCIPLES AND TECHNIQUES I4 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or 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 <br> 4 credits.

Theoretical and practical training in plant cell and tissue culture, and plant genetic engineering. Includes overview of current techniques, biosafety and regulatory requirements, and experimental design and analysis used in fundamental and applied research on plants. Valuable hands-on training to those interested in careers in biotechnology. Enroll Info: None
Requisites: (BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY/BOTANY 152, or 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: Spring 2019

## AGRONOMY/A A E/INTER-AG/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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## AGRONOMY/HORT 360 - GENETICALLY MODIFIED CROPS: SCIENCE,

 REGULATION \& CONTROVERSY2 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101, BOTANY/BIOLOGY 130, 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: PL PATH/BOTANY 123, BOTANY/BIOLOGY 130, SOIL SCI/ ENVIR ST 101, SOILSCI 132, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, BOTANY 100, or AGRONONY 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## AGRONOMY/AGROECOL/DY SCI 371 - MANAGED GRAZING FIELD STUDY <br> 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017

## AGRONOMY 375 - SPECIAL TOPICS

1-4 credits.

Special topics on issues relevant to Agronomy. Enroll Info: None Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## AGRONOMY/HORT 376 - TROPICAL HORTICULTURAL SYSTEMS

 1 credit.Highlight the connections between tropical plants and society through a combination of readings, writing assignments, lectures, and collaborative work. Discussions 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 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. By the end of this course, the student will be able to make connections between horticulture and conservation, food security, nutrition, and global health. Enroll Info: None
Requisites: Junior standing
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
AGRONOMY 377 - CROPPING SYSTEMS OF THE TROPICS
3 credits.
Crops and cropping systems of the tropics. The environmental requirements of the major crops, their botany, and how they fit into local farming systems will be emphasized. For students with broad interests in tropical agriculture and food production. Enroll Info: None
Requisites: (BOTANY/BIOLOGY 130 or 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## AGRONOMY 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION <br> 1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Agronomy and internship site supervisor. Enroll Info: 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: Fall 2020
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## AGRONOMY/DY SCI/INTER-AG 471 - FOOD PRODUCTION SYSTEMS AND SUSTAINABILITY <br> 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. Enroll Info: None 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Senior standing only
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: (GENETICS 466 or 467) and (BOTANY/BIOLOGY 130,
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 2020

## AGRONOMY/HORT 502 - TECHNIQUES OF PLANT BREEDING

 1 credit.Lab and field techniques used in breeding and maintaining economic crops. Enroll Info: None
Requisites: (GENETICS 466 or 467) and (BOTANY/BIOLOGY 130, 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. Enroll Info: Students should have completed at least one course in Botany, Agronomy, or Plant Sciences to feel comfortable with the course content.
Requisites: 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 2020

## AGRONOMY/C\&E SOC/MED HIST/PHILOS 565 - THE ETHICS OF MODERN BIOTECHNOLOGY <br> $3-4$ credits.

Study of ethical issues arising from the application of modern biotechnology to microorganisms, crops, and non-human animals. Readings cover moral theory, technology studies, political philosophy, the science used in biotechnology, and current regulations governing its use.

## Enroll Info: None

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: No
Last Taught: Fall 2020

## 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). Enroll Info: 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 2019

## 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. Enroll Info: None
Requisites: (CHEM 341 or 343 ) and ((BOTANY/BIOLOGY 130 and ZOOLOGY/BIOLOGY 102) or 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 <br> 1 credit.

Addresses absorption, biotransformation, elimination of toxins in a wide variety of taxa (plants, invertebrates, vertebrates). Enroll Info: None
Requisites: M\&ENVTOX 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. Enroll Info: None
Requisites: M\&ENVTOX 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. Enroll Info: None
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. Enroll Info: 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY/BOTANY/
ENVIR ST 260) and (PHYSICS 103 or CHEM 103, 109 or 115 ); or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: Knowledge of statistics such as FSTAT 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 2019

## 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. Enroll Info: Knowledge of statistics such as FSTAT 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 2019

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
AGRONOMY/HORT 811 - BIOMETRICAL PROCEDURES IN PLANT BREEDING
3 credits.
Use of statistical methods to facilitate improvements in quantitative traits of cultivated plants. Enroll Info: None
Requisites: (STAT/F\&W ECOL/HORT 572, GENETICS 466 or
GENETICS 467) or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
AGRONOMY 875 - SPECIAL TOPICS
1-4 credits.
Special topics on issues relevant to Agronomy. Enroll Info: None
Requisites: 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

## AGRONOMY 920 - SEMINAR

1 credit.
Weekly seminar topics in agronomy and horticulture. Enroll Info: None
Requisites: 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

## AGRONOMY/ATM OCN/BOTANY/ENTOM/ENVIR ST/F\&W ECOL/GEOG/

 ZOOLOGY 953 - INTRODUCTION TO ECOLOGY RESEARCH AT UWMADISON
## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None 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

## AGRONOMY 990 - RESEARCH

1-9 credits.
Independent writing and research to complete thesis or dissertation requirements. Enroll Info: None
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

## AIR FORCE AEROSPACE STUDIES (A <br> F AERO)

## A F AERO 101 - HERITAGE AND VALUES I

1 credit.
An introduction to the United States Air Force with an overview of the basic characteristics, missions, and organization of the Air Force. Featured topics include: officership and professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills. Leadership lab activities. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
A F AERO 102 - HERITAGE AND VALUES II
1 credit.
Designed to provide a knowledge-level understanding of the employment of air and space power, from an institutional, doctrinal, and historical perspective. Leadership Lab activities. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## A F AERO 201 - TEAM AND LEADERSHIP FUNDAMENTALS I 1 credit.

Provides a fundamental understanding of both leadership and team building. Learn valuable leadership skills, including listening, understanding themselves, being a good follower and efficient problem solving and apply these leadership perspectives to team building activities, discussions, and conflict management. Leadership Lab activities. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## A F AERO 202 - TEAM AND LEADERSHIP FUNDAMENTALS II 1 credit.

provides a fundamental understanding of both leadership and team building. Designed to prepare cadets for field training while building leadership and teamwork skills through positions in the detachment and Leadership Lab activities. Enroll Info: None
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 2020

## A F AERO 301 - LEADING PEOPLE AND EFFECTIVE COMMUNICATION

 3 credits.Utilize field training experience to take a more in-depth look at leadership. Special Emphasis is placed on enhancing communication skills and exploring the value of communication in leadership roles. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors. Leadership Laboratory activities. Enroll Info: None
Requisites: A F AERO 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 2020

## A F AERO 302 - LEADING PEOPLE AND EFFECTIVE COMMUNICATION II

 3 credits.Provides a fundamental understanding of leadership. Gain an understanding of the leadership process with its complex interaction among leaders, followers and circumstances. Includes leadership lab activities. Enroll Info: None
Requisites: A F AERO 301
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## A F AERO 401 - NATIONAL SECURITY AFFAIRS

3 credits.

Examines national security, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics include military as a profession, officership, military justice, civilian control, preparation for active duty, and current military issues. Final refinement of communication skills. Includes leadership lab activities.
Requisites: A F AERO 304
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## A F AERO 402 - LEADERSHIP RESPONSIBILITIES \& COMMISSIONING PREPARATION

3 credits.
Focuses on preparing cadets for life as Second Lieutenants. Provides the foundation to understand their role as military officers and how they are directly tied to our National Security Strategy. Provides an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. Includes Leadership Lab activities. Enroll Info: None
Requisites: A F AERO 401
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## AMERICAN INDIAN STUDIES (AMER <br> 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.
Enroll Info: None
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 2020

## AMER IND/AFROAMER/ASIAN AM/CHICLA/FOLKLORE 102 INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None 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 2020

## AMER IND 199 - DIRECTED STUDY

1-3 credits.
Independent study for freshmen and sophomores in collaboration with a faculty member. Enroll Info: Open to Fr and So only; cons inst 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 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.
Enroll Info: None
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 2012
AMER IND 250 - INDIANS OF WISCONSIN
3 credits.
Introduces students 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Course Designation: Ethnic St - Counts toward Ethnic Studies requirement
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 2020

## AMER IND 302 - SECOND SEMESTER OJIBWE

 3 credits.Continuation of Ojibwe language study, with an emphasis on traditional winter cycle myths. Enroll Info: AMER IND 301. Open to Fr
Requisites: None
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 2019

## AMER IND/ENVIR ST 306 - INDIGENOUS PEOPLES AND THE ENVIRONMENT <br> 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. This course 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. Enroll Info: None

## 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: So st or cons inst
Requisites: None
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

## 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. Enroll Info: None
Requisites: None
Course Designation: Ethnic St - Counts toward Ethnic Studies
requirement
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2015
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. Enroll
Info: AMER IND 100, COM ARTS 350 or cons inst
Requisites: None
Course Designation: Ethnic St - Counts toward Ethnic Studies requirement
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2014
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. Enroll Info: None
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
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
AMER IND/ANTHRO 353 - INDIANS OF THE WESTERN GREAT LAKES
3 credits.
Description and analysis of Indian cultures in the area around the western Great Lakes, with special emphasis on traditional cultures of the Indians in Wisconsin. Enroll Info: ANTHRO 100, 104 or cons inst
Requisites: None
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 2012

## AMER IND/ANTHRO 354 - ARCHAEOLOGY OF WISCONSIN

 3 credits.Introduces students to the archaeological evidence for the diverse Native American cultures of Wisconsin over the past 12,000 years. Enroll Info: None
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
Sustain - Sustainability
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. Enroll Info: None
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: Fall 2013

## AMER IND/LINGUIS 371 - SURVEY OF NORTH AMERICAN INDIAN LANGUAGES <br> 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. Enroll Info: None 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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## AMER IND 401 - OJIBWE LANGUAGE III

3 credits.
Represents the third semester of the Ojibwe language, focusing on word structure and conversational skills. Enroll Info: None
Requisites: AMER IND 302
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 2019

## AMER IND 402 - OJIBWE LANGUAGE IV

3 credits.
Represents the fourth semester in the Ojibwe language, focusing on conversational skills. Enroll Info: None
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/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. Enroll Info: None
Requisites: Junior standing and ANTHRO/AMER IND 314, FOLKLORE
344, FOLKLORE 100, FOLKLORE 230, or FOLKLORE 320
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 <br> 3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America. Enroll Info: None
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 2020

## AMER IND/LSC 444 - NATIVE AMERICAN ENVIRONMENTAL ISSUES AND THE MEDIA <br> 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2017
AMER IND 450 - ISSUES IN AMERICAN INDIAN STUDIES 3 credits.

Content varies depending on instructor. Special focus on American Indian thought and perspectives on subjects in the arts and sciences. Enroll Info: None
Requisites: Consent of instructor
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: Fall 2020
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. Enroll Info: A five credit course in botany or biology (e.g., BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY 151) or cons inst Requisites: None
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: Fall 2020

## AMER IND/HISTORY 490 - AMERICAN INDIAN HISTORY

3-4 credits.
Enroll Info: Jr st or cons inst
Requisites: None
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

## AMER IND/HDFS 522 - AMERICAN INDIAN FAMILIES

3 credits.
Interdisciplinary examination of American Indian families in historical and contemporary contexts. Emphasizes the changing experience and structure of Native families in response to changing political, economic, social, and cultural pressures and policies over the past 200 years and contemporary challenges. Enroll Info: None
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
Last Taught: Spring 2014
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
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. Enroll Info: None 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

## AMER IND/SOC WORK 658 - AMERICAN INDIAN AFFAIRS

2-3 credits.
Contemporary concerns and conditions of American Indians examined in historical, cultural and legal perspective. Enroll Info: None
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 2012
AMER IND 699 - DIRECTED STUDY
1-3 credits.
Independent study for junior, senior and graduate students in collaboration with a faculty member. Enroll Info: Jr, Sr or Grad st, and cons inst
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 2020

## AMER IND/HISTORY 941 - INDIANS AND EMPIRES

3 credits.

Examining the centuries of imperial competition in Native America, this seminar explores recent developments in early American Indian history. Enroll Info: None
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. Enroll Info: None
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 2020
ANAT\&PHY 335 - PHYSIOLOGY
5 credits.

Comprehensive coverage of human physiology from cellular to organsystem level. Topics include homeostasis, membrane transport, cellular neurophysiology, regulation of metabolism, and functions of the nervous, endocrine, muscular, cardiovascular, respiratory, renal, and gastrointestinal systems. Enroll Info: Not open to students with credit for PHYSIOL 335 prior to fall 2018.
Requisites: Sophomore standing, (ZOOLOGY/BIOLOGY 101, BOTANY/ BIOLOGY 130, 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: Fall 2020

## 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. Enroll Info: None 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: Fall 2020

## 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. Enroll Info: None
Requisites: ANAT\&PHY 337 (KINES 337 before fall 2018), or 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: Fall 2020
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. Enroll Info: None
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 2020

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. Enroll Info: Not open to students with credit for PHYSIOL 335 or 435 prior to fall 2018 or ANAT\&PHY 335
Requisites: Junior standing, (ZOOLOGY/BIOLOGY 101, BOTANY/
BIOLOGY 130, 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 2020
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. Enroll Info: None
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 2020

## ANATOMY (ANATOMY)

## ANATOMY 329 - HUMAN ANATOMY-KINESIOLOGY

2 credits
Laboratory with dissection of human cadaver specimens and study of prosections. Enroll Info: None
Requisites: ANAT\&PHY 338
Repeatable for Credit: No
Last Taught: Spring 2017

## ANATOMY 622 - HUMAN ANATOMY-PHYSICAL THERAPY, OCCUPATIONAL THERAPY <br> 6 credits.

Gross human anatomy involving complete dissection of the human body. Special emphasis is placed on the musculoskeletal and peripheral nervous systems, and living subject and surface anatomy. Enroll Info: None
Requisites: Declared in Occupational Therapy MS program or Doctor of Physical Therapy 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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
ANATOMY 699 - INDEPENDENT STUDY
1-4 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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

## ANESTHESIOLOGY (ANESTHES)

## ANESTHES 699 - INDEPENDENT STUDY

## $0-5$ credits.

Independent study projects as arranged with faculty or instructional staff. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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: Fall 2020

## ANESTHES 919 - INDIVIDUALIZED ANESTHESIOLOGY CLINICAL ELECTIVE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
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

## ANESTHES 950 - ADVANCED ANESTHESIOLOGY WORKSHOP 1 credit.

Focused workshop designed for graduating medical students matched into Anesthesiology. Activities include lectures, discussions, problembased learning discussion (PBLD), simulation, hands-on workshops. Enroll Info: None
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 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 AN SCI 399. Enroll Info: So st, and consent of supervising instructor and academic advisor.
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2019

## AN SCI/DY SCI 101 - INTRODUCTION TO ANIMAL SCIENCES

4 credits.
Anatomy physiology, nutrition, genetics, reproduction, marketing, meats and management of dairy and beef cattle, swine, sheep, poultry and horses; lectures, laboratories and discussion. Field trips. Enroll Info: None 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 2020

## AN SCI 110 - ANIMAL HANDLING

1 credit.
Hands-on course that gives students an understanding of livestock handling techniques, proper restraint, administering injections, and drawing blood samples. Students also learn about animal response to human presence and the effect of facility design on animal behavior. Enroll Info: An Sci/DY SCI/AN SCI 101
Requisites: Freshman or Sophomore standing. Must have taken DY SCI/ AN SCI 101.
Repeatable for Credit: No
Last Taught: Spring 2017

## AN SCI 150 - CAREER ORIENTATION ANIMAL/POULTRY SCIENCES

 1 credit.An introduction to resume preparation, student employment, internships, and graduate and professional school programs with presentations by numerous graduates who discuss their career path following a B.S. degree in Animal Science or Poultry Science. Enroll Info: None
Requisites: DY SCI/AN SCI 101
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Crse in zoo or equiv or cons inst. Open to Fr
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 2020

## AN SCI 220 - GROWTH, COMPOSITION AND EVALUATION OF MEAT ANIMALS <br> 4 credits.

Principles and application of objective and subjective techniques for identifying quantitative and qualitative traits associated with breeding animals, market animals and meat. Statistics, growth, anatomy, genetics. Field trips to livestock farms and meat processing plants. Enroll Info: An Sci/DY SCI/AN SCI 101 or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2018

AN SCI 221 - ADVANCED MEAT ANIMAL EVALUATION LAB
2 credits.
Review and practical application of subjects covered in Animal Sciences 220. Field trips to livestock farms, meat processing plants and to the National Meat Animal Evaluation Contest. Enroll Info: AN SCI 220 cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2018
AN SCI 250 - HORSE SCIENCE AND MANAGEMENT
3 credits.

General principles. Emphasis on anatomy and physiology, management, behavior, reproduction, health, and nutrition. Lab period offers handson learning opportunities and short field trips. Mandatory field trip on a weekend day. Enroll Info: None
Requisites: Completion of Animal Sciences/Dairy Sciece 101 is required. 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 2019
AN SCI 289 - HONORS INDEPENDENT STUDY
1-2 credits

Enroll Info: Enrolled in the CALS Honors Program Sophomore or Junior standing. INTER-AG 288
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

Enroll Info: Open to Freshmen, Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## AN SCI/FOOD SCI 305 - INTRODUCTION TO MEAT SCIENCE AND TECHNOLOGY <br> 4 credits.

Application of biological, technological, and economical principles to muscle and related tissue utilized for food. Enroll Info: None

Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or 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: Spring 2020

## AN SCI/DY SCI/NUTR SCI 311 - COMPARATIVE ANIMAL NUTRITION

 3 credits.Nutrients and their source, assimilation, function and requirement. Enroll Info: None

Requisites: Must have completed BMOLCHEM 314 Intro to Human Biochemistry or CHEM 341 Intro Organic Chemistry or CHEM 343 Intro Organic Chemistry or BIOCHEM 501 Intro Biochemistry
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 2020

AN SCI/DY SCI 313 - ANIMAL FEEDS AND DIET FORMULATION 1 credit.

Designed as a companion course for Dairy Science 311 (comparative animal nutrition) with emphasis on quantitative and practical aspects of animal feeds and diet formulation. Enroll Info: MATH 112, Dy Sci/AN SCI/
DY SCI 101, or consent of instructor; concurrent registration in Dy Sci/An
Sci/NUTR SCI/AN SCI/DY SCI 311 recommended
Requisites: DY SCI/AN SCI 101
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 2019

## 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. Field trips are planned. Enroll Info: An Sci/DY SCI/AN SCI 101 or Poul Sci 101
Requisites: None
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. Software application core programs will be Microsoft Office for Windows suite. Enroll Info: An Sci/DY SCI/AN SCI 101 or Poul Sci 101, Ag Econ 215 or ECON 101 or equivalent. Open to Freshmen Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2019
AN SCI/DY SCI 320 - ANIMAL HEALTH AND DISEASE MANAGEMENT 3 credits.

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. Enroll Info: ZOOLOGY/BIOLOGY 101/102, BIOLOGY/BOTANY/ ZOOLOGY 152, Biocore or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
AN SCI/FOOD SCI 321 - FOOD LAWS AND REGULATIONS
1 credit.
Food laws and regulations, regulatory and commerical grading standards used in the food industry. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Spring 2020

## AN SCI/BOTANY/MICROBIO 335 - THE MICROBIOME OF PLANTS, ANIMALS, AND HUMANS <br> 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. Enroll Info: None
Requisites: MICROBIO 303
Repeatable for Credit: No
Last Taught: Spring 2020

## AN SCI/DY SCI 361 - INTRODUCTION TO ANIMAL AND VETERINARY GENETICS <br> 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.
Enroll Info: Genetics 160 or 466 or con reg course in statistics
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## AN SCI/DY SCI 362 - VETERINARY GENETICS

2 credits.
The genetic basis for predisposition to diseasse or resistance to disease in livestock and companion animal species. Genetic defects, their discovery, diagnosis and treament. Enroll Info: Dy Sci/AN SCI/ DY SCI 361; or Genetics 160 or 466 Zool/Bot 152

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Dy Sci/AN SCI/DY SCI 361
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: An Sci/DY SCI/ AN SCI 101 or cons inst

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## AN SCI/DY SCI 373 - ANIMAL PHYSIOLOGY

3 credits.
Students will develop an understanding of physiological processes that regulate the body, learn the anatomy and function of different physiological systems, describe interactions between organ systems, study regulation of an organ system from the molecular to whole animal level, and identify differences between species in the same systems. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 or (BOTANY/BIOLOGY/ ZOOLOGY 151 and BOTANY/BIOLOGY/ZOOLOGY 152)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## AN SCI 375 - SPECIAL TOPICS

1-4 credits
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
AN SCI 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION 1-8 credits.

Enroll Info: So or Jr or Sr st cons of supervising inst, advisor, and internship program coordinator
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 2020
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
AN SCI/DY SCI 414 - RUMINANT NUTRITION \& METABOLISM 3 credits.

Ruminant Nutrition 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. Enroll Info: None
Requisites: NUTR SCI/AN SCI/DY SCI 311 and (BIOCHEM 301 or 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: An Sci/DY SCI/ AN SCI/NUTR SCI 311313
Requisites: None
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## AN SCI 430 - SHEEP PRODUCTION

3 credits.
Application of recent research in breeding, feeding, health, and management to develop an efficient sheep production system. Includes an active, hands-on laboratory working with sheep. Prior completion of DY SCI/AN SCI 313 highly recommended. Enroll Info: NUTR SCI/AN SCI/ DY SCI 311, DY SCI/AN SCI 361, or DY SCI/AN SCI 434
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2016

## AN SCI 431 - BEEF CATTLE PRODUCTION

3 credits.
Application of genetics, systems of mating, physiology, nutrition and economics to the production of beef. Prior completion of DY SCI/ AN SCI 313 highly recommended. Enroll Info: None
Requisites: NUTR SCI/AN SCI/DY SCI 311, DY SCI/AN SCI 361, or DY SCI/AN SCI 434
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
AN SCI 432 - SWINE PRODUCTION
3 credits.
Application of research findings in breeding, feeding, management and marketing to modernize production. Lab: Farm visits, practical exercises in testing changes, "tools" used by producers. Prior completion of DY SCI/AN SCI 313 highly recommended. Enroll Info: NUTR SCI/AN SCI/ DY SCI 311, DY SCI/AN SCI 361, or DY SCI/AN SCI 434
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## AN SCI 433 - EQUINE BUSINESS \& MANAGEMENT

3 credits.
Application of diseases, health care, feeding, exercise physiology and business management relevant to horse industry. Students will develop problem solving skills and be exposed to equine businesses. Enroll Info: AnSci 250, AnSci 311, AnSci 361/362 or 363, and AnSci 434
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2018

## AN SCI/DY SCI 434 - REPRODUCTIVE PHYSIOLOGY

3 credits.
Principles of reproductive physiology, improvement of fertility, and artificial insemination. Enroll Info: Jr st, An Sci/DY SCI/AN SCI 101, or Zool 101 102; Zool 151152 recommended
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Sr st
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## AN SCI 444 - LABORATORY TECHNIQUES IN MAMMALIAN GAMETE AND EMBRYO BIOLOGY

3 credits.
This course is designed as an immersion experience based on the gradual release methodology of information delivery. Students are engaged in active/process learning whereby the principles and themes presented in the lecture portion of the course are immediately put into practice in the laboratory component of the course. Expected learning outcomes and learning objectives are therefore integrated into each lecture and laboratory. Each subsequent learning objective builds upon the knowledge acquired from the previous learning objective thus developing a scaffold or framework from which to proceed. This course will present students with challenges from cognitive and affective domains as they process information from both biological and ethical perspectives. Problem solving and conflict resolution skills will be displayed as students challenge themselves with the development of fine motor/coordination based skills as well as understanding that the product of their efforts has the potential to result in a live offspring. The bovine (cow/bull) will serve as our model in this performancebased course as students are expected to demonstrate competency in the nuances and complexities associated with the production of embryos in a completely artificial (in vitro) environment. The student will be expected to demonstrate critical thinking by developing a simulated professional enterprise involving one or more of the assisted reproductive technologies they are exposed to. Students will demonstrate proficiency in and competency of in vitro maturation, fertilization, embryo development, cell culture, sterile bench technique, synchronization of the female estrus cycle, embryo transfer, non-surgical embryo recovery and cryopreservation by completing 2 complete cycles of embryo production in vitro. Students work in teams of 3-4 individuals. During the first production cycle students will perform all tasks while observing and working alongside of the instructor. The second production cycle will require the students to perform independently (of the instructor) who will only intervene in the event that the actions of the student will be lethal to the process and/or outcome. Each week (Monday) students will be presented with a controversial subject or topic related to cellular biology and/or reproduction. These ethical dilemmas are almost entirely within the realm of human assisted reproduction. Using any means and/ or media desired, students are required to formulate responses in favor and in opposition of said topic. Each Friday, following the course quiz, students will be randomly selected to defend one side of the argument by articulating their viewpoint from the assigned perspective even if it is not their personal opinion. The objective of this exercise is to demonstrate the nature and influence bioethics may have on policy decisions impacting future research endeavors and/or science based initiatives. As well, students will grapple with representing a viewpoint they may be in personal conflict with. Enroll Info: Animal Sciences 434 or consent of instructor
Requisites: None
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2018

## 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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: DY SCI/AN SCI/FOOD SCI/SOIL SCI 472
Course Designation: Sustain - Sustainability
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. Enroll Info: An Sci/DY SCI/AN SCI 101 or consent of instructor

Requisites: None
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. Enroll Info: None
Requisites: None
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2019

## AN SCI 511 - BREEDER FLOCK AND HATCHERY MANAGEMENT

 3 creditsHistory 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. Enroll Info: An Sci/DY SCI/ AN SCI 101 Zool 101102 or Zool 151 or equiv
Requisites: None
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. Enroll Info: An Sci/DY SCI/AN SCI 101 Zool 101102 or Zool 151 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
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. Enroll Info: None
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: Fall 2019

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/ BOTANY 151 and 152 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/ BOTANY 151 and 152 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: GENETICS 466 and Statistics 572 or cons inst
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: No
Last Taught: Fall 2019
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). Enroll Info: 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 2019
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. Enroll Info:

## None

Requisites: Graduate/professional standing, STATS 301 and (NUTR SCI/ BIOCHEM 510 or concurrent enrollment)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## AN SCI 681 - SENIOR HONOR THESIS

2-4 credits.
Enroll Info: Honors program candidacy
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2020
AN SCI 682 - SENIOR HONORS THESIS
2-4 credits.
Continuation of 681. Enroll Info: Honors program candidacy AN SCI 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019
AN SCI 691 - THESIS
2 credits.
Enroll Info: Sr st cons inst
Requisites: Consent of instructor
Repeatable for Credit: No

## AN SCI 692 - THESIS

2 credits.
Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No

## AN SCI 699 - SPECIAL PROBLEMS

1-3 credits.

Enroll Info: Sr st and cons inst
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Students should have undergraduate coursework in ruminant nutrition, biochemistry, and microbiology as background. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## 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. Students should have undergraduate coursework in ruminant nutrition, biochemistry, and microbiology as background. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## AN SCI 875 - SPECIAL TOPICS

1-4 credits.
Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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

## AN SCI/DY SCI/GENETICS 951 - SEMINAR IN ANIMAL BREEDING

 0-1 creditsEnroll Info: None
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 ENDOCRINOLOGYREPRODUCTIVE 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. Enroll Info: None 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

AN SCI 990 - RESEARCH
1-12 credits.
Enroll Info: None
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

## 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. Enroll Info: Open to Fr. Not open to stdts with a prior coll anthro crse
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 2020

## ANTHRO 102 - ARCHAEOLOGY AND THE PREHISTORIC WORLD

 3 credits.Introduction to prehistoric 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 famous prehistoric sites as case studies to illustrate concepts and techniques used by archaeologists in their efforts to understand the rise, florescence, and demise of vanished societies. Enroll Info: None
Requisites: None
Course Designation: Breadth - Either Humanities or Social Science
Level - Elementary
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## ANTHRO 104 - CULTURAL ANTHROPOLOGY AND HUMAN DIVERSITY

 3 creditsIntroduction to cultural anthropology for non-majors; comparative cross-cultural consideration of social organization, economics, politics, language, religion, ecology, gender, and cultural change. Includes 25\% coverage of U.S. ethnic and racial minorities. Enroll Info: Open to Fr. Not for cr for those who have taken Anthro 204
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 2020

## ANTHRO 105 - PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY

 3 creditsGenetic basis of morphological, physiological and behavioral variations within and between human populations, and their origins and evolution. Enroll Info: Open to Fr with HS biology or cons inst
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 2020

## 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. Enroll Info: None 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 2020

## ANTHRO/FOLKLORE/INTL ST/LINGUIS 211 - GLOBAL LANGUAGE

 ISSUES4 credits.
A series of modules, each showcasing one language and its culture. Each module tackles a major issue about language, such as extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality. Enroll Info: None
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
ANTHRO 212 - PRINCIPLES OF ARCHAEOLOGY
3 credits.
This course introduces students to the methods, historical development, and scientific principles of archaeology. Through a combination of lecture, discussion, and laboratory activities, students discover how archaeologists generate and interpret information about the human past. The course familiarizes students with scientific inquiry and provides a foundation for pursuing advanced archaeological courses and field research. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ANTHRO/MED HIST 231 - INTRODUCTION TO SOCIAL MEDICINE

 3 credits.This interdisciplinary course will provide students with analytical tools for the critical examination of the social, cultural, political and economic determinants of health conditions and medical practice. We will pay 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. The course will make emphasis on the important role that conditions of structural violence and inequality play as determinants of health conditions in a globalized world. Enroll Info: None
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

## ANTHRO 237 - CUT 'N' MIX: MUSIC, RACE, AND CULTURE IN THE CARIBBEAN <br> 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. Enroll Info: None
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

## ANTHRO/AFROAMER/C\&E SOC/GEOG/HISTORY/LACIS/POLI SCI/SOC/ SPANISH 260 - LATIN AMERICA: AN INTRODUCTION <br> 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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
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
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. Readings and lectures will draw on material from around the world, with a particular focus on the experience of marginalized minority people in the United States. Enroll Info: None
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 2020

## ANTHRO/AFRICAN/AFROAMER/GEOG/HISTORY/POLI SCI/SOC 277 -

 AFRICA: AN INTRODUCTORY SURVEY4 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. Enroll Info: None
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: Fall 2020

## ANTHRO 300 - CULTURAL ANTHROPOLOGY: THEORY AND ETHNOGRAPHY <br> 3 credits.

Survey of cultural anthropology with emphasis on ethnographic description, methodology, and contemporary theory. Course focuses on both humanistic and social scientific approaches to human sociocultural diversity. Enroll Info: None
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

## 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. Enroll Info: Open to Fr. Stdts may not receive cr for both LINGUIS 101301
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: Fall 2020

## 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 hominoidhominid transition. Enroll Info: ANTHRO 105 or 107
Requisites: None
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: Spring 2019

## ANTHRO 303 - HUMAN SKELETAL ANATOMY

4 credits.
A comprehensive examination of skeletal anatomy at both the gross and histologic levels; methods for the archaeological identification of skeletal fragments; criteria for the estimation of age, sex, stature, and other aspects of forensic anthropology. Lecture and lab. Enroll Info: ANTHRO 105, 107, or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ANTHRO 304 - HEREDITY, ENVIRONMENT AND HUMAN POPULATIONS

 3 credits.Cultural and ecological factors influencing the composition and structure of human population; expression and distribution of genetic characters within and between populations; racial differences, race formations; constitutional studies, mating systems and their genetic consequences. Enroll Info: None
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: ANTHRO 104 or 204 or cons inst
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 2015

## ANTHRO 309 - PREHISTORIC EUROPE

3 credits.
European prehistory from the earliest evidence of human occupation up to the threshold of the Classical Greek and Roman civilizations. Enroll Info: Anthro 112 or 321 or Jr st or cons inst
Requisites: None
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 2011

## ANTHRO 310 - TOPICS IN ARCHAEOLOGY

3 credits.
Selected areas, periods or problems in archaeology. Enroll Info: Variable Requisites: None
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 2020

## ANTHRO 311 - ARCHAEOLOGICAL CHEMISTRY

3 credits.
Introduction to laboratory analysis with particular reference to artifactual and non-artifactual remains. Lectures cover methods and interpretation of results; laboratory involves application of methods to archaeological materials. Enroll Info: None
Requisites: None
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 2012

## 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. Enroll Info: So st or cons inst
Requisites: None
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. Enroll Info: Prior crse in archaeology, So st, or cons inst
Requisites: None
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
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. Enroll Info: None
Requisites: ANTHRO 112 or 321
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

## ANTHRO 327 - PEOPLES OF THE ANDES TODAY

3 credits
Modern Quechua and Aymara-speaking peoples in Ecuador, Peru, and Bolivia: high-altitude herding and farming; Andean models for social organization; land-centered belief and ritual; ethnic discrimination and responses to it; transformations of the Andean cultures in urban and mining settings. Enroll Info: Jr st or cons inst
Requisites: None
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 2011

## 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. Enroll Info: Intro crse in cult anthro or cons inst
Requisites: None
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 2020

## 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. Enroll Info: Anthro 112 or 321 or cons inst
Requisites: None
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. Stone tools, stone beads, carved stone images and reliefs have been recovered in the archaeological record provide a unique perspective on the ways in which humans have adapted in the past. It will also explore gender roles in lithic technology and how specific technologies were used to create utilitarian as well as ornamental and symbolic objects. The archaeological examples will be studied through readings, films and class discussion, as well as laboratory experiments in the manufacture and examination of a wide range of artifacts. Ethnographic and archaeological examples of chipped and ground stone tools, stone beads, carved soft and hard stone seals, and stone vessels will also be examined. Students will 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. Enroll Info: None
Requisites: ANTHRO 100, 102, 212, 321, or 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: Spring 2018

## ANTHRO 339 - ARCHAEOLOGY OF WARFARE AND HUMAN NATURE

 3 credits.Introduces students 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. It highlights archaeological methods that recognize past warfare practices. Using case studies from the Pleistocene to the present, the course explores variations of warfare from all over the world. Students will become familiar with: 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. Course materials will include perspectives from other fields. Historical and cross-cultural ethnographic research will be juxtaposed against archaeological cases to provide contextualized and data-rich examinations. Students will become prepared to critically evaluate arguments, claims, and interpretations made about war, peace, and human nature. Enroll Info: None
Requisites: ANTHRO 100, 102, 212, 321, or 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: Spring 2019

## 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. Students will 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). Students will also 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. Enroll Info: None
Requisites: Sophomore standing or ANTHRO 100 or ANTHRO 104
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 2016

## 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. Enroll Info:
ANTHRO 104 or cons inst
Requisites: None
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 2018

## 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. Enroll Info: ANTHRO 104 or cons inst
Requisites: None
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

## ANTHRO 348 - ECONOMIC ANTHROPOLOGY

3-4 credits
Production, distribution and consumption in nonliterate societies; land tenure and personal property concepts, prestige systems, and incentives to labor. Enroll Info: ANTHRO 104 or cons inst

Requisites: None
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

## 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. Enroll Info: Jr st or cons inst
Requisites: None
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

## 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. Enroll Info: Intro archaeol crse or cons inst

Requisites: ANTHRO 102, ANTHRO 112, AMER IND 208, or ANTHRO 321
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: Summer 2020
ANTHRO/AMER IND 353 - INDIANS OF THE WESTERN GREAT LAKES
3 credits.

Description and analysis of Indian cultures in the area around the western Great Lakes, with special emphasis on traditional cultures of the Indians in Wisconsin. Enroll Info: ANTHRO 100, 104 or cons inst
Requisites: None
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 2012

## ANTHRO/AMER IND 354 - ARCHAEOLOGY OF WISCONSIN

3 credits.
Introduces students to the archaeological evidence for the diverse Native American cultures of Wisconsin over the past 12,000 years. Enroll Info: None

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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ANTHRO 357 - INTRODUCTION TO THE ANTHROPOLOGY OF JAPAN

 3-4 creditsJapanese culture from anthropological perspectives. Emphasis on the order of meaning which serves both as model for and model of the day-today behavior and thought processes of the Japanese. Enroll Info: Jr st Requisites: None
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

## ANTHRO 358 - ANTHROPOLOGY OF CHINA

3 credits.

Topics of immediate concern to the field of anthropology and Chinese studies. Focus on social and cultural changes in rural, urban, as well as ethnic minority settings in post-1949 China. Enroll Info: So st or cons inst
Requisites: None
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 2013
ANTHRO/LACIS 361 - ELEMENTARY QUECHUA
4 credits.

Phonology and morphology; concentration on the acquisition of conversational skills; reading of texts of graded difficulty; three hours classroom and one hour lab. Enroll Info: None
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ANTHRO/LACIS 362 - ELEMENTARY QUECHUA

4 credits.
Continuation of 361. Enroll Info: ANTHRO/LACIS 361 or cons inst. Open to Fr
Requisites: None
Course Designation: Frgn Lang - 2nd semester language course

## 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 2020
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. Enroll Info: None
Requisites: 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: ANTHRO/ LACIS 363 or cons inst
Requisites: None
Course Designation: Frgn Lang - 4th 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: Spring 2020

## 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. Enroll Info: Jr st or cons inst
Requisites: None
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 archaeological field project. Also instruction in the description and analysis of artifacts. The site(s) excavated vary each year. Normally, residence off campus beyond commuting distance to Madison. At least 5 full work days per week usually required. Enroll Info: ANTHRO 102 or 112 or 321 cons inst

## 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 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. Students also learn about Maya culture, history, folklore, and language politics. Enroll Info: None
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Students also learn about Maya culture, history, folklore, and language politics. Enroll Info: ANTHRO/LACIS 376. Open to Fr
Requisites: None
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ANTHRO 391 - BONES FOR THE ARCHAEOLOGIST

3 credits.
An introduction to the principles and techniques in the identification and interpretation of animal bones. Short lectures and weekly laboratory exercises; analysis of an archaeological bone assemblage. Enroll Info: Intro archaeol crse or cons inst
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 2020
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. Enroll Info: An elem course in zool or botany So st; Genetics/Botany/Zool 160 or 466 recommended
Requisites: Sophomore standing and ZOOLOGY/BIOLOGY/BOTANY 151, BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY 101, BIOCORE 301, 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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ANTHRO 411 - THE EVOLUTION OF THE GENUS, HOMO
3 credits.
Course will focus on the course of human evolution beginning with the Pliocene appearance of our genus, Homo, and ending with the worldwide spread of modern Homo sapiens sapiens throughout the Old World. Enroll Info: ANTHRO 105, or 107, or 302, or cons inst
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
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. Enroll Info: None
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

## ANTHRO 420 - INTRODUCTION TO PRIMATOLOGICAL RESEARCH

 3 credits.Supervised research on topics selected by students. Students will work independently or in small groups, will design their own research project, collect data, and will report their findings. This course intends to develop the skills necessary for independent research in Primatology. Enroll Info: None
Requisites: ANTHRO 100, 105, 458, 668, or PSYCH 450
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: So st
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 2018

## 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. Enroll Info: None
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 2019
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. Enroll Info: None
Requisites: Junior standing and ANTHRO/AMER IND 314, FOLKLORE
344, FOLKLORE 100, FOLKLORE 230, or FOLKLORE 320
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

## ANTHRO/AMER IND/FOLKLORE/GEN\&WS 437 - AMERICAN INDIAN WOMEN <br> 3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America. Enroll Info: None
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 2020

## 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. Enroll Info: None 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

## 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. Enroll Info: Jr st or cons inst 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
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. Enroll Info: Current enrollment in a UWMadison 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 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. Enroll Info: Current enrollment in a UWMadison study abroad program
Requisites: None
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: 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. Enroll Info: Current enrollment in a UW-
Madison 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. Enroll Info: Jr st ANTHRO 104 or cons inst
Requisites: None
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
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. Throughout consider 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. Enroll Info: None
Requisites: ANTHRO 105, ZOOLOGY/BIOLOGY/BOTANY 152,
ZOOLOGY/BIOLOGY 101, (BIOCORE 381 and 382), ZOOLOGY/BOTANY/ ENVIR ST 260, ZOOLOGY/ENVIR ST/F\&W ECOL 360, or 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None 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. Enroll Info: A five credit course in botany or biology (e.g., BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY 151) or cons inst Requisites: None
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: Fall 2020
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. Enroll Info: An intro course in anthro or envir st or cons inst
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017

## ANTHRO 490 - UNDERGRADUATE SEMINAR

3 credits.
Discussion and preparation of reports on specific topics indicated by changing title of seminar. Enroll Info: Jr st and cons inst. Not open to Grad stdts; intro crse appropriate to the topic
Requisites: Junior standing and declared in Anthropology major or Archaeology certificate
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
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. Involves field work and/or archival research. Enroll Info: ANTHRO 300 or FOLKLORE/
GNS 200 or cons inst
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: Spring 2018

## ANTHRO/FOLKLORE/MUSIC/THEATRE 539 - THE FOLKLORE OF FESTIVALS AND CELEBRATIONS

3 credits.
Survey of interdisciplinary literature on social/performative folklore aesthetics and environments by in-depth study of three festivals and ceremonies. Required field trips. Enroll Info: None
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 2014

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020
ANTHRO 601 - PROSEMINAR IN BIOLOGICAL ANTHROPOLOGY 3 credits.

A comprehensive overview of the major theoretical developments and debates in biological anthropology. Topics include the concept of adaptation, molecular and population genetics, the fossil record, and the interaction between genes, social behavior and culture. Enroll Info: ANTHRO 105 or 107 or cons inst; Jr, Sr, or Grad st

## Requisites: None

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.
Evolutionary theory relevant to human evolution including morphological, behavioral and genetical aspects. Enroll Info: Cons inst instruction in morphology, heredity, stat
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: Fall 2017
ANTHRO 604 - SEMINAR: TOPICS IN PHYSICAL ANTHROPOLOGY OF THE LIVING
3 credits.
Theory and practice of techniques in measurement and description of human variation. Topics change. When the topic warrants, lab sessions. Cons inst. Enroll Info: Grad st cons inst
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 2011

## ANTHRO 605 - SEMINAR-CURRENT PROBLEMS IN PALEOANTHROPOLOGY

3 credits.
Research with attention on the evolutionary biology of hominids. Enroll Info: None
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: 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. Enroll
Info: Sr or Grad st or cons inst
Requisites: None
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. Enroll Info: Jr st; college level elem crse in biology or psych
Requisites: Junior standing; not open to special students
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/FOLKLORE 639 - FIELD SCHOOL: ETHNOGRAPHY OF WISCONSIN FESTIVALS

$6-8$ credits.
A review of key methodological and theoretical approaches for studying festivals, in situ observation of summer festivals and small town folk and ethnic museums, and supervised writing and photographic assignments.

## Enroll Info: None

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: Summer 2011

## ANTHRO/RELIG ST 666 - THE ANTHROPOLOGY OF SHAMANISM AND OCCULT EXPERIENCE

3 credits.
Shamanism is a global form of religious practice involving direct contact with the spirit world through ecstatic and magical techniques. This course examines shamanic practice and considers allied forms of occult experience outside of the major world religions. Enroll Info: So st
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 2011

## 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. Enroll Info: None
Requisites: ANTHRO 458 or PSYCH 450 or ZOOLOGY/ENVIR ST/
F\&W ECOL 360 or ZOOLOGY/ANTHRO/BOTANY 410 or ZOOLOGY/ BOTANY/F\&W ECOL 460
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ANTHRO 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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
ANTHRO 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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 2020

## ANTHRO 690 - PROBLEMS IN ANTHROPOLOGY

3-4 credits.
Independent research in specific problems in physical anthropology, archaeology, or cultural anthropology; under supervision. Enroll Info: Cons inst or Jr or Sr major or Grad st
Requisites: Junior standing and declared Anthropology major 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

ANTHRO 691 - SENIOR THESIS
2 credits.
Enroll Info: None
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
ANTHRO 692 - SENIOR THESIS
2 credits.
Enroll Info: None
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
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 techinques, preparation of materials for storage or display. Enroll Info:
Prior coursework in archaeology and cons instr
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 2020

## ANTHRO 698 - DIRECTED STUDY

1-6 credits.
Enroll Info: Jr or Sr st. Graded on a $\mathrm{Cr} / \mathrm{N}$ basis. Previous or con exposure to the same subj on an intmed level; requires cons inst
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.
Letter graded. Enroll Info: Previous or con exposure to the same subj on an intmed level, Jr or Sr st cons inst
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 2020

## ANTHRO/ART HIST/DS/HISTORY/LAND ARC 764 - DIMENSIONS OF MATERIAL CULTURE <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## ANTHRO/HISTORY 774 - METHODS FOR HISTORICAL RESEARCH IN NON-LITERATE SOCIETIES <br> 3 credits.

Techniques and critical analysis applied to written, oral, archaeological, linguistic and cultural data. Stresses problems of synthesis. Exercises. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ANTHRO 900 - FUNDAMENTALS OF ANTHROPOLOGICAL THEORY

 3 credits.Seminar introducing students to fundamentals of anthropological thought using a cross-section of basic works in social science.
Emphasizes discussion, critical analysis, and development of professional writing skills. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## ANTHRO 919 - ANTHROPOLOGY AND INTERNATIONAL HEALTH

 2 credits.Examination of international health issues from the theoretical and methodological perspectives of anthropology. Course includes case studies of applied medical anthropology work as well as critical analysis of development initiatives in public health. Enroll Info: None 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2014

## ANTHRO/C\&E SOC/ECON/SOC 925 - SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS <br> 2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world. Enroll Info: None Requisites: 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

## ANTHRO 940 - SEMINAR-PROBLEMS IN CULTURAL ANTHROPOLOGY

 3 credits.Current anthropological literature and methods. Assigned problems.
Enroll Info: Grad st or Sr st with permission cons inst
Requisites: 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

ANTHRO 942 - SEMINAR-ARCHAEOLOGICAL PROBLEMS
3 credits.
Current literature and methods and work on assigned problems. Enroll Info: None
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/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. Enroll Info: None
Requisites: 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

ANTHRO/A A E/C\&E SOC/GEOG/HISTORY/LACIS/POLI SCI/PORTUG/ SOC/SPANISH 982 - INTERDEPARTMENTAL SEMINAR IN THE LATINAMERICAN AREA
1-3 credits.
Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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/AFRICAN/ECON/GEOG/HISTORY/POLI SCI 983 INTERDEPARTMENTAL SEMINAR-AFRICAN STUDIES
3 credits.
Interdisciplinary inquiry in African society and culture. Enroll Info: None
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 990 - RESEARCH AND THESIS

1-3 credits.
Enroll Info: None
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
ANTHRO 999 - READING AND RESEARCH
1-9 credits.
Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Declared in Applied Biotechnology program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Declared in Applied Biotechnology program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Declared in Applied Biotechnology program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ABT 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Applied Biotechnology program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 pharmaceutics, agriculture, and biotechnology services. Enroll Info: None Requisites: Declared in Applied Biotechnology program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 ccGMP practices necessary to meet quality standards. Enroll Info: None
Requisites: ABT 700, 705, and 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: ABT 700, 705, and 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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.
Enroll Info: None
Requisites: ABT 735 and 740
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Declared in Applied Biotechnology program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None
Requisites: Declared in Applied Biotechnology program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: ABT 720 and 725
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None

## Requisites: ABT 700

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None

Requisites: ABT 700 and 715
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: ABT 700 and 715
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: ABT 789
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None Requisites: Not open to students declared in BS-Art, BFA-Art, or BS-Art Ed programs
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

## 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 problemsolving 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## ART 104 - THREE-DIMENSIONAL DESIGN

3 credits.

Applying design principles to 3-D investigations. Lectures, studio exercises, discussions. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## ART 112 - DRAWING I

3 credits.
To develop perceptions, use of perspective, line, light and dark, development of space, and expressive qualities in drawing. Enroll Info:

## None

Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Not open to students declared in BS-Art or BFA-Art degrees.
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
Requisites: ART 112, or declared in a BS-Art, BFA-Art, or BS-Art Ed degree program
Repeatable for Credit: No
Last Taught: Fall 2020
ART 214 - SCULPTURE I
4 credits.
Introduction to techniques and basic sculpture concepts to provide a survey of sculpture studio practices. Enroll Info: None
Requisites: ART 104
Repeatable for Credit: No
Last Taught: Fall 2020

## ART 222 - INTRODUCTION TO PAINTING

3-4 credits.
Introduction to various technical processes and aspects of painting. Studio practice, lectures, discussions, and critiques. Enroll Info: None
Requisites: ART 102, 112, 212, or 302
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2015

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: ART 212 and (ART 100, 108, or 208)
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: ART 112, 212, 222, 316, 326, or 336
Repeatable for Credit: No
Last Taught: Fall 2020
ART 244 - ART METAL I
3-4 credits.
Basic jewelry techniques; metal fabrication dealing with piercing, soldering, forming. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

ART 302 - COLOR
4 credits.
Color phenomena and visual perception as applied in art problems. Lectures, readings in theory, philosophy, and history of design. Enroll Info: None
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: Fall 2020

## ART 306 - RELIEF PRINTMAKING

3-4 credits.
Woodcut, collage print, linoleum cut, and wood engraving; color printing. Studio practice, lectures, discussion, critiques. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: None
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ART 107 or declared in an Art graduate program Course Designation: 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 2017

## ART 312 - INTERMEDIATE DRAWING I

3-4 credits.
The exploration of conceptual drawing in various media. Emphasis on conceptual/formal solutions. Enroll Info: None
Requisites: (ART 212, 232, 316, or 326), or declared in an Art graduate program
Repeatable for Credit: No
Last Taught: Fall 2020

## ART 314 - SCULPTURE II

4 credits.
Continued investigation in sculpture studio practices with an emphasis on developing concepts and technique. Enroll Info: None
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: Fall 2020
ART 316 - LITHOGRAPHY
4 credits.
Direct drawing on stone with crayon and tusche, transfer techniques, color processes; studio practice, lectures, discussions, and critiques.
Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ART 318 - INTRODUCTION TO VIDEO, PERFORMANCE \& INSTALLATION

## ART

4 credits.
An introduction to time-based art forms including video, installation, and visual art performance. Enroll Info: None
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 2020

## 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.
Enroll Info: None
Requisites: ART 222 or declared in an Art graduate program
Repeatable for Credit: No
Last Taught: Fall 2020

## ART 324 - CERAMICS II

4 credits.
Continued investigation into forming; hand-building, throwing, slipcasting, press molding; with emphasis on individual form concepts.
Glazing, decorating, firing techniques including reduction, oxidation and primitive methods. Enroll Info: None
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: Fall 2020

## ART 326 - ETCHING

4 credits.
Introduction to intaglio printmaking techniques. Studio problems in platemaking and printing. Enroll Info: None
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: Fall 2020
ART 328 - THE COMPUTER IN THE VISUAL ARTS
4 credits.
Survey of the use of the computer in art: history, artists' work, techniques, and the practical generation of computer-assisted imagery. Cons inst.
Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: None
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: Fall 2020
ART 334 - WOOD WORKING
3-4 credits.
Exploration of wood as a medium for constructing creative and functional three-dimensional forms. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ART 336 - SERIGRAPHY
3-4 credits

Materials and techniques of silk screen process; silk screen as a fine art form. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## ART/DANCE 341 - SOUND DESIGN FOR THE PERFORMING AND VISUAL

 ARTS3 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. Enroll Info: None
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: Fall 2020
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. Enroll Info:
None
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: Fall 2020

## 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. Enroll Info: None 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 students to the basic principles of graphic design. Students will 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. Enroll Info: None
Requisites: (ART 102 or 107) and declared in Art, Art Education, or Certificate in Studio Art program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
ART 354 - GLASSWORKING
4 credits.

Glassworking toward a personal concept of material. Enroll Info: None
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: Fall 2020

## ART 356 - INTERMEDIATE TYPOGRAPHY

4 credits.
Examines the design and organization of printed word and letterforms in combination with other graphic elements. Exploration of experimental typographic forms, interpretive design, and text and image relationships will be emphasized. This course can be taken concurrently with ART 346 Enroll Info: None
Requisites: ART 107, 108, 208, and 256
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
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 2020

## 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.

## Enroll Info: None

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 2020
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. Enroll Info: None
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: Fall 2020

## ART 393 - INTERNSHIPS 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. Enroll Info: None
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ART 107 or declared in an Art graduate program
Repeatable for Credit: No
Last Taught: Spring 2020
ART 414 - ART FOUNDRY
3 credits.
Traditional and nontraditional methods of fine art foundry. Enroll Info:

## None

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 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020
ART 438 - HISTORY OF GRAPHIC DESIGN AND TYPOGRAPHY 3 credits.

Examines the major developments in graphic design and typography as the fields emerged and defined themselves during the last one hundred years. Enroll Info: Students are encouraged to enroll in ART 346 and 438 concurrently.
Requisites: (ART 102 or 107) and 346
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: 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 446 - ARTISTS' BOOKS

4 credits.
The multiple and sequential visual imagery of the non-printed book, including its design and creation. Enroll Info: None
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 2020

## ART 448 - SPECIAL TOPICS

1-4 credits.
Various beginning-level special topics courses in Art. Enroll Info: None

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None 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: Fall 2020

## ART 454 - NEON: LIGHT AS SCULPTURE

4 credits.
Introduction to light as sculptural medium including techniques for creating art using luminous tubes. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
ART 456 - ILLUSTRATION
3 credits.
Practice of illustration for commercial printing. Enroll Info: None 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: No
Last Taught: Spring 2020

## ART 469 - INTERDISCIPLINARY STUDIES IN THE ARTS

1-4 credits.
Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None
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. Enroll Info: None

## Requisites: None

Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## 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. Enroll Info: None
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: Fall 2020

## ART 506 - ADVANCED RELIEF PRINTMAKING

4 credits.
Emphasis on color problems, surface qualities; studio practice,
discussion, critiques. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: ART 307
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, for 3 number of completions
Last Taught: Summer 2020

## ART 508 - COLLOQUIUM IN ART

1 credit.
Prominent artists, curators critics present their work through lectures and visual presentations. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
ART 518 - ARTIST'S VIDEO
4 credits.
Principles and techniques in video art. Enroll Info: None
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 2019

## ART 521 - INSTALLATIONS AND ENVIRONMENTS

4 credits.

Studio projects in site-specific art making supplemented by readings and examples of relevant contemporary artists' work. Enroll Info: None
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 2020
ART 522 - ADVANCED PAINTING I
4 credits.
Technical processes; emphasis on personal expression, concepts, in various approaches to painting. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: (ART 102 or 107), 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. Enroll Info: None
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 2020

ART 528 - DIGITAL INTERACTIVE STUDIO
4 credits.
Concepts and techniques of digital interactive art with an emphasis on physical interaction. Enroll Info: None
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. Enroll Info: None
Requisites: ART 107 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 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019

## 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. Enroll Info: None
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: Fall 2020
ART 534 - ADVANCED WOOD WORKING
4 credits.
Development of advanced concepts and techniques in wood-based functional and/or fine art forms. Enroll Info: None
Requisites: ART 334 or declared in an Art graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
ART 536 - ADVANCED SERIGRAPHY
4 credits.
Development of advanced concepts and techniques using silk screen processes to create fine art forms. Enroll Info: None
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: Fall 2020

## ART 542 - ADVANCED WATERCOLOR I

4 credits.
Transparent and opaque watercolor media; studio practice, critiques, field trips. Enroll Info: None
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 2020

## ART 544 - ADVANCED ART METAL I

4 credits.
Advanced techniques in creating functional and/or fine art metal objects. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

ART 548 - SPECIAL TOPICS: ADVANCED LEVEL
1-4 credits.
Topical courses in art at an advanced level. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## ART 554 - ADVANCED GLASSWORKING

4 credits.
Advanced concepts and techniques in fine art glass. Enroll Info: None
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: Fall 2020

## ART 556 - GRAPHIC DESIGN FOR INTERACTIVE MEDIA

4 credits.
Applies graphic design theory and process to interactive media, including web documents and other forms of electronic publishing. Topics covered include visual design; the fundamentals of website structure and navigation; web typography; accessibility and usability; and writing HTML and CSS. Projects examine the web as a platform for both client-driven and self-published work. Enroll Info: None
Requisites: (ART 102 or 107 or Art graduate program), ART 346, 438, and two of: (ART 458, 463, 465, 467, 546, 556, 565 or 568)
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## 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. Enroll info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: No

## ART 560 - GRAPHIC DESIGN SENIOR THESIS PROJECT AND EXHIBITION <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (ART 102 or 107), 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. Enroll Info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (ART 102 or 107), 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. Enroll Info: None
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. Enroll Info: None
Requisites: 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
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. Enroll Info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: No
Last Taught: Fall 2020

## ART 576 - ADVANCED PHOTOGRAPHY

4 credits.
Emphasis on advanced techniques, color, personal concepts and expression, criticism, communicative potential of photography. Enroll

## Info: None

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: Fall 2020

## ART 608 - INTERDISCIPLINARY CRITIQUE IN THE VISUAL ARTS

3 credits.
Group critique for advanced students working in the various disciplines of the visual arts. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info:

## None

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 2020

## ART 618 - ADVANCED ARTISTS' VIDEO

4 credits.
Advanced course in the production of contemporary video art, emphasizing editing skills and the use of special effects, as well as critical analysis and theoretical issues. Enroll Info: None
Requisites: ART 518 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 2012

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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

ART 624 - ADVANCED CERAMICS II
4 credits.
Advanced concepts and practices using clay/ceramics to create fine art objects. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 selfinitiated projects that combine printmaking or photographic techniques with digital output. Enroll Info: None
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 2020

## ART 642 - ADVANCED WATERCOLOR II

4 credits.
Advanced concepts and processes in transparent and opaque watercolor media. Enroll Info: None
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. Enroll Info: None
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: Fall 2020

ART 646 - ART OF THE PRINTED BOOK
4 credits.
Introduction to the art of the printed book using traditional and state of the art printing processes in a studio format. Enroll Info: None
Requisites: ART 346 and (ART 356 or 446) 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 2011

## ART 652 - ADVANCED PAINTING: NEW FIGURATION III

4 credits.
Advanced investigations in depicting the human figure as a source for creative and independent viewpoints in painting and other media. Enroll Info: None
Requisites: ART 552 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 2013

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. Enroll Info: None
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 2020

## ART 660 - ART AND TECHNOLOGY

4 credits.
An advanced seminar/studio class dealing with theoretical and aesthestic issues relating to the use of technology in contemporary art practice. Readings, and lectures will prepare students for weekly discussions. Each student will complete one research project and one studio project. Enroll Info: None
Requisites: (ART $318,409,428,429,476,528,529$, or 636 ) or declared in an Art graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

## 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. Enroll Info: None
Requisites: (ART 102 or 107), 346 and 438
Repeatable for Credit: Yes, unlimited number of completions

## ART/AFROAMER 674 - SELECTED TOPICS ON AFRO-AMERICAN ARTISTS <br> 3 credits.

Works of Black artists in the U.S. discussed historically in terms of movements which they created and in terms of trends evolving on an international scale. Jr st and cons inst. Enroll Info: None
Requisites: Consent of instructor
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: Yes, unlimited number of completions
Last Taught: Fall 2012
ART 699 - INDEPENDENT STUDY
1-3 credits.
Independent undergraduate work in advanced area of study under direction of art faculty. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ART 722 - GRADUATE PAINTING I
2-3 credits.
Graduate level instruction in all painting media. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
ART 736 - GRADUATE GRAPHICS WORKSHOP I
2-6 credits.
Graduate level study in advanced graphics media. Emphasis on
development of personal concepts. Enroll Info: None
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 2020
ART 826 - GRADUATE INTAGLIO PRINTMAKING II
2-3 credits.
Continued grad-level instruction in advanced intaglio methods; exploration toward an individual and mature imagery in graphics materials. Enroll Info: None
Requisites: ART 726
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

ART 908 - SEMINAR-ART
3 credits.
Special topics in grad-level seminars. Enroll Info: None
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 2020
ART 912 - ADVANCED RESEARCH-DRAWING
1-4 credits.
Graduate level instruction in all drawing media processes. Enroll Info:
None
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. Enroll Info: None
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 922 - ADVANCED RESEARCH-PAINTING
1-4 credits.
Graduate level instruction in all painting processes. Enroll Info: None 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 924 - ADVANCED RESEARCH-CERAMICS

1-4 credits.
Graduate level instruction in all ceramics processes. Enroll Info: None
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 942 - ADVANCED RESEARCH-WATERCOLOR
1-4 credits.
Graduate level instruction in all watercolor processes. Enroll Info: None
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 2014

## ART 944 - ADVANCED RESEARCH-ART METAL

1-4 credits.
Graduate level instruction in metalsmithing. Enroll Info: None
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 996 - ADVANCED RESEARCH-GRAPHICS

1-4 credits.
Graduate level instruction in all printmaking and photography processes. Enroll Info: None
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 999 - INDEPENDENT STUDY
1-4 credits.
Independent graduate work in advanced area of study under direction of art faculty. Enroll Info: None
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 EDUCATION (DEPARTMENT OF ART) (ART ED)

ART ED/CURRIC 322 - INFORMATION DESIGN FOR VISUAL LEARNING 3 credits.

Develop information design skills by building a foundation in art, design, and visual culture to create visual presentation tools using a wide variety of digital software and hardware as well as traditional media for instruction and learning. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2014
ART ED/CURRIC 323 - ART IN ELEMENTARY EDUCATION
3 credits.
Basic principles and problems in teaching art; basis for an understanding and evaluation of children's art work. Enroll Info: None
Requisites: Declared in Art Education
Repeatable for Credit: No
Last Taught: Fall 2020

ART ED/CURRIC 324 - ART IN SECONDARY EDUCATION 3 credits.

Methods and philosophies of teaching art; problems in implementing theories in practical situations in junior and senior high schools. Enroll Info: None
Requisites: Declared in Art Education
Repeatable for Credit: No
Last Taught: Fall 2020
ART ED 326 - DESIGN EDUCATION
3 credits.
Study and application of information, environment, object, and experience design to K -12 art education. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2014
ART ED/CURRIC 423 - STUDENT TEACHING IN ART IN ELEMENTARY SCHOOLS
2-6 credits.
Supervised student teaching, including curriculum development, instruction and assessment in elementary art classrooms. Enroll Info: None
Requisites: CURRIC/ART ED 323
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
ART ED/CURRIC 424 - STUDENT TEACHING IN ART IN SECONDARY SCHOOLS
2-6 credits.
Supervised student teaching in secondary (middle or high school) art classrooms. Enroll Info: None
Requisites: CURRIC/ART ED 324
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
ART ED/CURRIC 470 - PRACTICUM IN ELEMENTARY SCHOOL ART 3 credits.

Selection of appropriate instructional materials and their application to a practical problem in teaching to selected students. Enroll Info: None
Requisites: Declared in Art Education
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Art Education
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020

## ART ED 557 - LEARNING THROUGH DESIGN

3 credits.
Study of design fields (information design, environmental design, and experience design) in order to identify, examine, and research how designers create objects that enhance experiences with respect to learning, work, and leisure. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2013

ART ED/CURRIC 570 - ART IN EXCEPTIONAL EDUCATION
3 credits.
Approaches to developing programs and teaching art to exceptional students in public schools, special schools, and community institutions. Enroll Info: None
Requisites: Declared in Art Education
Repeatable for Credit: No
Last Taught: Spring 2014
ART ED 699 - INDEPENDENT READING AND RESEARCH 1-3 credits.

Student-designed project and activities to explore a topic in depth. Enroll Info: None
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 2020

## ART ED/CURRIC 951 - SEMINAR IN ART EDUCATION

3 credits.
Examination and analysis of ideas and studies in art education and related areas preparatory to formulating research problems. Enroll Info: None
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

## ART ED 999 - ADVANCED INDEPENDENT READING

1-3 credits.
Student-designed project and activities to explore a topic in depth. Enroll Info: None
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 101 - THE STUDY OF ART, PRESENT AND PAST

 4 credits.A critical introduction to the materials, techniques, and interpretation of art. Discussions of the art of various times and cultures, including contemporary America. Enroll Info: None
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: Summer 2011

## ART HIST 103 - TOPICS IN ART HISTORY

3-4 credits.
Offers an introduction to world art by taking a thematic approach. Course 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. Enroll Info: None

## 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 2020
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 students to the 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. Enroll Info: None
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 2020

## ART HIST 105 - INTRODUCTORY TOPICS IN ART HISTORY

 3 credits.This is a seminar-type course primarily to be offered as a FIG coordinating course. Topics will vary. Enroll Info: None
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 2019

## ART HIST 201 - HISTORY OF WESTERN ART I: FROM PYRAMIDS TO CATHEDRALS <br> 4 credits.

Examines the arts and cultures of Europe and the Mediterranean basin before the Renaissance. We explore 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. Consider the social and historical contexts of art and artistic production - art and imperialism, ethnicity, technology, religious ritual and belief, and myth and storytelling. These 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. We develop crucial skill sets: critical visual analysis, contextual interpretation, research methods and resources, historiography, and oral, written and digital communication. Enroll Info:

## None

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

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 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. This course teaches students how to analyze images and objects produced through such exchanges that occurred around the world from ancient times through the contemporary. Its aims are to 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, the course also develops sensitivity to visual and material form and a solid foundation in the practice of visual and material analysis. Enroll Info: None
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 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. Enroll Info: None
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
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. Rather than offering a comprehensive survey of architecture, this course offers a case study, cross-cultural approach to the study of architecture. In doing so, we will learn to appreciate the interaction between culture, history, and architectural form across time and space. Enroll Info: None
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

## ART HIST 227 - THE ENDS OF MODERNISM

4 credits.
This course 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. In this thematic survey, then, Modernism will emerge as a heterogeneous set of images and attendant discourses which, negatively or positively, continue to work within the contemporary artistic and cultural moment. Enroll Info: None
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 2017

## ART HIST/AFROAMER 241 - INTRODUCTION TO AFRICAN ART AND ARCHITECTURE

3 credits.
This course 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 21 st century and thematic/cultural case studies: artists and aesthetics; textiles, decorative, and personal/body arts; architecture; and individual artists. Enroll Info: None
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
ART HIST/AFROAMER 242 - INTRODUCTION TO AFRO-AMERICAN ART 3 credits.

Historical survey of Afro-American art. Beginning with the African heritage and concluding with creativity of the 1970's, it examines the evolution of Afro-American art. Attention to the aesthetic sensibilities of diverse styles as well as the social significance of Black art within the art arena. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## ART HIST/CLASSICS 300 - THE ART AND ARCHAEOLOGY OF ANCIENT GREECE <br> 3-4 credits.

Explores the art and archaeology of ancient Greece from the Bronze Age through the Hellenistic period. Enroll Info: None
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: Fall 2020
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. The course will consider the long history of Greek vases from about 800 $B C$ 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. We will make use of the excellent collection of Greek vases in the Chazen Museum, and students will write research papers using that collection. Enroll Info: None
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 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. Enroll Info: So st ART HIST 201 or 300 or cons inst

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: Spring 2019

## ART HIST 303 - TOPICS IN ART HISTORY

3 credits.
Course topics will vary as to media, geography, culture, and time frame.
Enroll Info: None
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

## ART HIST/CLASSICS 304 - THE ART AND ARCHAEOLOGY OF ANCIENT

 ROME3-4 credits.
Explores the art and archaeology of ancient Italy, the Roman Republic, and the Roman Empire from the Iron Age to Late Antiquity. Enroll Info: None
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: Spring 2020

## ART HIST 305 - HISTORY OF ISLAMIC ART AND ARCHITECTURE

 3 credits.This course surveys the architecture, landscape, book arts, and luxury objects produced in Islamic contexts from Spain to India from the 7 th through the 21 st centuries. Attention will be focused upon the relationships between Islamic visual idioms and localized religious, political, and socioeconomic circumstances. In particular, lectures and readings will examine the vital roles played by theology, royal patronage, ceremonies, gift exchange, trade, and workshop practices in the formulation of visual traditions. Enroll Info: Sophomore standing
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 2020

## ART HIST 307 - FROM TOMB TO TEMPLE: ANCIENT CHINESE ART AND RELIGION IN TRANSITION <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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

## 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 relaionship of the arts to theology, ritual, concepts of the body, rulership and courtliness. Enroll Info: ART HIST 201. Open to Fr
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: Spring 2019

ART HIST 320 - ITALIAN RENAISSANCE ART
3-4 credits
Painting, sculpture, and architecture. Enroll Info: Sophomore standing or consent of instructor
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: Spring 2018
ART HIST 321 - ITALIAN ART: 1250-1400
$3-4$ credits.

Developments in the arts within the broader historical and cultural context: issues of artistic style, patronage, the artist's emerging selfconsciousness. Major artists include Giotto, Duccio, the Pisani, Simone Martini, and Altichiero. Enroll Info: So st or cons inst
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: Fall 2011
ART HIST 322 - ITALIAN ART FROM DONATELLO TO LEONARDO DA
VINCI, 1400-1500
3-4 credits.
Stylistic analysis of 15th century art in Florence and other regional centers. Emphasis on the relationship between the arts and the historical/cultural context. Enroll Info: So st or cons inst
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: Spring 2014
ART HIST 323 - FROM MICHELANGELO \& RAPHAEL TO TITIAN: THE ARTS IN 16TH CENTURY ITALY
3-4 credits.

This course runs 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. Enroll Info: None
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: 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? In this course, we will look 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. Enroll Info: None
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 332 - NORTHERN PAINTING AND GRAPHICS FROM BOSCH AND HOLBEIN TO BRUEGEL <br> 3-4 credits.

Late Renaissance and Mannerism in the Netherlands and Germany. Includes Bosch, Bruegel, Cranach, Holbein. Enroll Info: So st
ART HIST 202 or cons inst
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: Fall 2011

## 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. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst
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/ <br> NORTHERN ART

1-6 credits.
Treatment of an art historical topic in a course offered at a university outside the United States. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst
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 creditsTreatment of an art historical topic in a course offered at a university outside the United States. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst

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. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst
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 Piranese. Enroll Info: So st or cons inst
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: Spring 2015

## ART HIST 346 - BRITISH ART AND SOCIETY FROM THE EIGHTEENTH CENTURY TO THE PRESENT <br> 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. Enroll Info: So st or cons inst
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: Fall 2020

## ART HIST 350 - 19TH CENTURY PAINTING IN EUROPE

 3-4 credits.History of European painting from 1800 to 1900 . Enroll Info: So st or cons inst
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: Spring 2018
ART HIST 351 - 20TH CENTURY ART IN EUROPE
3-4 credits.
Major artists and movements from 1880 to 1950. Enroll Info: So st
ART HIST 202 or cons inst
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: 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. Enroll Info: Sophomore standing or consent of instructor
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 2017
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. Enroll Info: So st ART HIST 202 or cons inst
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: Fall 2020

## ART HIST 357 - HISTORY OF WISCONSIN ARCHITECTURE, 1800PRESENT <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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: 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, this course will survey both visual culture and canonical monuments of art in Northern Europe c. 1400-1570. We 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, students will develop strong skills in visual analysis, a deep sense of historical context, and experience with traditional methodologies. Enroll Info: None
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 2020

## ART HIST/DS 363 - AMERICAN DECORATIVE ARTS AND INTERIORS: 1620-1840 <br> 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. Enroll Info: None
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 2016

## ART HIST 364 - HISTORY OF AMERICAN ART: ART, MATERIAL CULTURE, AND CONSTRUCTIONS OF IDENTITY, 1607-PRESENT

3-4 credits.
This course 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. In this course, works of art and artifacts are interpreted not as passive objects that reflect history, but rather as active agents that are entwined with broader historical, social, and cultural events. A particular focus will be on the ways in which American art and material culture participates in the construction of identities - ranging from global identities and national identities (in particular, how notions of "American" have been constructed) to regional, group and individual identities. Although the course will mainly cover works of painting, sculpture, and architecture, other forms of material culture, especially photography, decorative arts and popular illustrations, will also be considered. Attention will also be given to the writings of artists and critics, as well as texts by contemporary art historians, historians, and other scholars that illustrate the variety of methods that are currently being brought to bear on the interpretation of American art, architecture, and material culture. Students will learn skills that will help them construct histories of American art and material culture in written narratives (papers) as well as in online exhibitions through a series of short research exercises. Outside of examinations, assignments will be tied to works of art on display at the Chazen Museum of Art or other local collections. Enroll Info: ART HIST 202
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: Spring 2019

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. By using the term contemporary, however, we also refer to a certain broadly defined set of ideas that inform and emerge from this highly diverse production. The course will largely (although not exclusively) focus on American and European art after the "decline" of Modernism. That entails familiarizing the class 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. Enroll Info: None
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 2020
ART HIST 368 - AMERICAN ARCHITECTURE: THE 19TH CENTURY 3-4 credits.

Major architects and trends in American architecture from the Greek Revival to the Chicago School. Enroll Info: So st or cons inst
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: Spring 2012

## ART HIST 371 - CHINESE PAINTING

3-4 credits.
A survey of Chinese painting from the third century B.C. to the 18 th century, introducing the important masters of each period and discussing the esthetic concepts and theories that underlie traditional connoisseurship. Enroll Info: So st or cons inst
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: Spring 2012
ART HIST 372 - ARTS OF JAPAN
3-4 credits.
A survey of Japanese art, including painting, sculpture, architecture, woodblock prints and various crafts. Enroll Info: So st or cons inst
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: Fall 2019

## ART HIST/RELIG ST 373 - GREAT CITIES OF ISLAM

3 credits.
This course offers 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. Integrating historical and religious studies, this course highlights the shifting nature of Islamic culture, from the tenth century CE to the present. Enroll Info: Sophomore standing

## 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: Fall 2019
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. Enroll Info: So st or cons inst 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: 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. Enroll Info: 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 2020
ART HIST 403 - TOPICS IN ART HISTORY
3 credits.
Topics will vary as to media, geography, culture, and time frame. Enroll Info: None
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 2020

## 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. Enroll Info: ART HIST 201, 300, 301, 302,
CLASSICS/ART HIST 300, or cons inst
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: Spring 2020

## ART HIST 407 - TOPICS IN NINETEENTH CENTURY ART

3-4 credits.
An advanced lecture course, covering specific aspects of nineteenth century visual culture. Topics include: representations of race and gender; the history of photography; popular imagery and aspects of Modernism. Enroll Info: Jr st one art hist crse at 200 level one at 300 level, or cons inst
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: Fall 2019

## ART HIST 408 - TOPICS IN TWENTIETH-CENTURY ART

3-4 credits.
Advanced lecture course on 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. Enroll Info: Jr st; one art hist crse at 200 level; one art hist crse at 300 level; or cons inst
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: Fall 2016

## ART HIST 409 - TOPICS IN CONTEMPORARY ART

3 credits.
Topics offered concern the rigorous study of the history and theory of contemporary art. Enroll Info: None
Requisites: ART HIST 202, 227 or 365
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

## 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. Enroll Info: So st 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: Fall 2020

## ART HIST 412 - TOPICS IN AFRICAN AND AFRICAN DIASPORA ART HISTORY <br> 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. Enroll Info: Jr st Afro-Amer 241 or 243 or cons inst
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: 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. In their quest to dominate the Islamic world and control the Mediterranean, each dynasty openly competed and responded to the others in architectural projects, ceremonial practices and courtly arts. At the same time, the monolithic model of courtly patronage of the arts was replaced gradually by one in which the urban classes increasingly shaped the art market, resulting in new visual forms. This course considers this turning point in the history of Islamic culture through the lens of art and architectural patronage. By exploring the architectural and urban projects of the three dynasties, we will examine competing visions of power, sources of legitimacy and the development of Cairo, Baghdad/Samarra and Cordoba as capital cities. We will 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. Course 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. Enroll Info: Sophomore Standing
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: Spring 2018

## ART HIST/MEDIEVAL 415 - TOPICS IN MEDIEVAL ART

 3 credits.An advanced lecture course, covering specific aspects of 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." Enroll Info: Jr st one Art Hist crse at 200 level and one at 300 level, or cons inst
Requisites: None
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 2020

## ART HIST 420 - TOPICS IN ITALIAN RENAISSANCE ART

3 credits.
An advanced lecture course, covering specific aspects of Italian Renaissance art. Topics may include: "Material Culture: Is 'Copying' Imitatio?"; "Concepts of Race"; "'Authorship' vs. Collaboration";
"Colonialism as Trade"; "Gender at Stake." Enroll Info: Jr st one Art Hist crse at 200 level and one at 300 level, or cons inst
Requisites: None
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 425 - RACE AND GENDER IN ITALIAN EARLY MODERN ART

 3 credits.This course 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. The course reevaluates imagery of nudes, witches, children, and material culture. Enroll Info: One of the following: ART HIST 202, 320, $321,322,323,341,525$ or 825
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: 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. Enroll Info: 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 2019

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst
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

## ART HIST 436 - STUDY ABROAD IN RENAISSANCE/BAROQUE/ NORTHERN ART <br> 1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst
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

## 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. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst
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

## ART HIST 438 - STUDY ABROAD IN AFRICAN/ASIAN ART

 1-6 creditsTreatment of an art historical topic in a course offered at a university outside the United States. Enroll Info: ART HIST 201 or 202; Jr st; or cons inst

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
ART HIST 440 - ART AND POWER IN THE ARAB WORLD 3 credits.

This course 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, we will investigate 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, we will explore competing visions of power and sources of legitimacy, through the lens of artistic production. Enroll Info: Sophomore standing
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: Fall 2017

## ART HIST 449 - TOPICS IN ARCHITECTURAL HISTORY

3 credits.

Assessment of how cultural phenomena help shape a given architectural development. Enroll Info: None

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 2013

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. Enroll Info: Jr st; ART HIST 201 or 202; and at least one other upper-level crse in art hist or cons inst
Requisites: None
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 2015

## ART HIST 457 - HISTORY OF AMERICAN VERNACULAR ARCHITECTURE AND LANDSCAPES <br> 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.
Enroll Info: Jr st at least one Art Hist crse, or cons inst
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: Fall 2016

ART HIST 463 - TOPICS IN AMERICAN MATERIAL CULTURE 3-4 credits.

In depth examination of special topics related to material culture and the decorative arts, including craftsmanship, consumerism, representations of race, ethnicity, and gender, and museum histories and exhibition practices. Enroll Info: Sophomore standing
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: Fall 2011

ART HIST/DS/HISTORY 464 - DIMENSIONS OF MATERIAL CULTURE 3 credits.

Approaches to the interdisciplinary study of the material world in order to analyze broader social and cultural issues. Guest speakers explore private and public objects and spaces from historic, ethnographic, and aesthetic perspectives. Enroll Info: None
Requisites: One course 300-level or higher in ART HIST or DS
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 2012

## ART HIST 468 - FRANK LLOYD WRIGHT

3-4 credits.

An analysis of Frank Lloyd Wright's architecture and writings. Enroll Info: Jr st one crse in architect hist or cons inst

Requisites: None
Course Designation: Breadth - Humanities
Level - Intermediate
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2016

ART HIST 469 - INTERDISCIPLINARY STUDIES IN THE ARTS 1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None

## Requisites: None

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 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, dimentions of ceramic development. Enroll Info: Undergrads: a prev crse in art hist or design satisfaction of Com B requirement. Knowledge of Japan recommended
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: 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. Enroll Info: Undergrads: a prev crse in art hist or relig studies satisfaction of Com B requirement. Knowledge of Asian religion recommended
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: Fall 2018

## ART HIST 479 - ART AND HISTORY IN AFRICA

3-4 credits.
Selected African art traditions in their historical and cultural settings.
Enroll Info: Jr st one crse in African art or cons inst
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: Spring 2018

ART HIST 500 - PROSEMINAR: SPECIAL TOPICS IN ART HISTORY 3 credits.

Enroll Info: Jr st cons inst
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: Fall 2020
ART HIST 505 - PROSEMINAR IN ANCIENT ART
3 credits.

Enroll Info: Jr st cons inst
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: Fall 2019

ART HIST 506 - CURATORIAL STUDIES EXHIBITION PRACTICE 3 credits.

This course will engage students in all aspects of the preparation of an exhibition for the Chazen Museum of Art or other exhibition spaces on campus. Students will 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 topic will be different each time the course is taught. Enroll Info: Junior Standing. At least one previous course in Art History at 300 level or above. Preference will be given to students enrolled in the Curatorial Studies Certificate programs
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: Fall 2018

## ART HIST 510 - PROSEMINAR IN ISLAMIC ART AND ARCHITECTURE

 3 credits.A rotating topic in Islamic Art and Architectural History Enroll Info: None
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

## ART HIST 515 - PROSEMINAR IN MEDIEVAL ART

3 credits.
Enroll Info: Jr st cons inst
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: Fall 2020

ART HIST 525 - PROSEMINAR IN ITALIAN RENAISSANCE ART 3 credits.

Enroll Info: Jr st cons inst
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: Fall 2015
ART HIST 535 - PROSEMINAR IN NORTHERN EUROPEAN PAINTING 3 credits

Enroll Info: Jr st cons inst
Requisites: None
Course Designation: Breadth - Humanities
Level - Advanced
\&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.

Enroll Info: Jr st cons inst
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 2017

ART HIST 556 - PROSEMINAR IN 20TH CENTURY EUROPEAN ART 3 credits

Enroll Info: Jr st cons inst
Requisites: None
Course Designation: Breadth - Humanities
Level - Advanced
\&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 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. Enroll Info: So st
Requisites: None
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 565 - PROSEMINAR IN AMERICAN ART
3 credits
Enroll Info: Jr st cons inst
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 2012
ART HIST 567 - PROSEMINAR IN AMERICAN ARCHITECTURE
3 credits.

Enroll Info: Jr st cons inst
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: Fall 2019

## ART HIST 569 - INTERDISCIPLINARY STUDIES IN THE ARTS

 1-4 creditsGuest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None
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 2014

ART HIST 575 - PROSEMINAR IN JAPANESE ART
3 credits.

Enroll Info: Any course treating Japanese art, or cons inst
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: Fall 2020
ART HIST 576 - PROSEMINAR IN CHINESE ART
3 credits.

Enroll Info: Cons inst or any other crse in Chinese art or ART HIST 203
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 2019

## 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. Enroll Info: Junior standing or consent of instructor
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 2016

## ART HIST 600 - SPECIAL TOPICS IN ART HISTORY

3 credits.
Enroll Info: Jr st, or cons inst
Requisites: None
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

ART HIST 601 - INTRODUCTION TO MUSEUM STUDIES I 3 credits.

History of museums and collecting; introduction to connoisseurship; studies and practices in art museum activities; experience in exhibition planning, research, cataloging, and installation. Enroll Info: Sr or Grad st; cons inst; Itd enrollment
Requisites: None
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
ART HIST 602 - INTRODUCTION TO MUSEUM STUDIES II 3 credits.

Continuation of 601 Enroll Info: ART HIST 601 cons inst
Requisites: None
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

## ART HIST 603 - CURATORIAL STUDIES COLLOQUIUM

3 credits.
This course is designed to introduce advanced undergraduate students to a broad range of questions, both theoretical and practical, related to curatorial practice. The core of the course is 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. With this ideal in mind, we will bring in a series of experts to engage with each other and with the class on the theories, objectives, and processes of conceiving, designing, and mounting exhibitions, as well as reaching different audiences with both physical and virtual exhibitions. Students will also be introduced to the distinctive collections and resources on campus and in the region. Enroll Info: Junior standing or consent of instructor
Requisites: None
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 <br> 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. Enroll Info: 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: Spring 2017

## ART HIST/AFROAMER 643 - SELECTED TOPICS IN AFRICAN DIASPORA ART HISTORY <br> 3 credits.

Art history of a specific African cultural tradition (eg. Yoruba, Kongo, Fon, Akan) and its transformation in the Caribbean, Central and South America in response to new social, historical, and hegemonic forces. Enroll Info:
Afro-Amer 241, 242, 243 or consent of instructor
Requisites: Afro-American Studies 241 or Afro-American Studies 242 required.
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: Fall 2012

## 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. Enroll Info: None
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 2020

## ART HIST 681 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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

## ART HIST 682 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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
ART HIST 691 - SENIOR THESIS
3-6 credits.
Enroll Info: Sr st and cons inst
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 2017

## ART HIST 692 - SENIOR THESIS

3-6 credits.
Enroll Info: Sr st and cons inst
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

## ART HIST 697 - UNDERGRADUATE CURATORIAL STUDIES INTERNSHIP (DIRECTED STUDY)

1-3 credits.
This directed study may serve as an elective for the new undergraduate certificate in Curatorial Studies, as an elective for the Material Culture certificate program, or for a specific stand-alone project. The goal is to give students credit for applied learning experiences in museums and other curatorial settings. Students must identify internship possibilities and have them approved for credit by the faculty member who will serve as instructor of record, and oversee the academic side of the internship.
The nature of the internship will vary according to the host institution, but to be accepted for credit, it must have a substantial research component. Examples include but are not limited to: assisting a curator or registrar with research for an exhibition or permanent collection display; producing wall texts and object labels in an exhibition or permanent collection display; researching and writing catalog entries or essays on an object or objects in an exhibition or permanent collection; preparing catalog entries for works in the permanent collection of a museum/historical society; assisting a curator preparing a dossier for acquisitions; researching conservation histories of objects; provenance research; preparing teaching materials associated with an exhibition or permanent collection either in print of online; preparing and giving public tours of exhibitions or permanent collections; participating in exhibition design. To fulfill a 3 -credit internship, the student must average approximately 12 hours a week throughout the semester, including working at the host institution on individual projects, and performing any necessary research and writing outside the host institution. In addition, the student should meet with the faculty advisor for a minimum of 1 hour each month. Enroll Info: None
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

## ART HIST 698 - DIRECTED STUDY

2-3 credits.
Enroll Info: Graded on a Cr/N basis; requires Jr or Sr st and cons inst
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 2010

## ART HIST 699 - DIRECTED STUDY

1-3 credits.
Enroll Info: Graded on a lettered basis; requires Jr or Sr st and cons inst
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ART HIST 701 - PRACTICUM IN ART HISTORY: BIBLIOGRAPHY, HISTORIOGRAPHY, METHODS <br> 3 credits.

Required methodology course for first-year graduate students in art history. 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. Enroll Info: None
Requisites: Declared in Art History graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ART HIST 703 - CURATORIAL STUDIES COLLOQUIUM

3 credits.
This course is designed to introduce graduate students to a broad range of questions, both theoretical and practical, related to curatorial practice. The core of the course is 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. With this ideal in mind, we will bring in a series of experts to engage with each other and with the class on the theories, objectives, and processes of conceiving, designing, and mounting exhibitions, as well as reaching different audiences with both physical and virtual exhibitions. Students will also be introduced to the distinctive collections and resources on campus and in the region. Enroll Info: None
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 <br> 3 credits.

Explores the art and archaeology of ancient Italy, the Roman Republic, and the Roman Empire from the Iron Age to Late Antiquity. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ART HIST 706 - TOPICS IN AMERICAN ART HISTORY

 3 credits.This graduate-level course typically meets with an intermediate to advanced level lecture course. However, the requirements for graduate students are different, consisting of journal entries, presentations, and a substantial research paper as well as attendance and participation in the lectures. Topics vary but may include such topics as "History of American Art, 1607-present;" "American Genre;" "The Material Culture of American Suburbs;" and "Modernism in American, 1900-1960." Enroll Info: None Requisites: 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

## ART HIST 707 - TOPICS IN NINETEENTH-CENTURY EUROPEAN ART

 3 credits.This course typically meets with an intermediate to advanced level lecture courses covering specific aspects of 19th-century visual culture. Topics may include: representations of race and gender; the history of photography; popular imagery, aspects of Modernism, Realism, and Pre-Raphaelitism. However, the requirements for graduate students are different, consisting of presentations and a substantial research paper. The meets-with course is AH407 Topics in European Art. Enroll Info: None 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 712 - TOPICS IN AFRICAN \& AFRICAN DIASPORA ART HISTORY <br> 3 credits.

This course typically meets with an intermediate to advanced level lecture course. However, the requirements for graduate students are different, consisting of mentoring, longer presentations, and a substantial research paper. Enroll Info: None
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.
This course typically meets with an advanced undergraduate topics course that focuses on 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). Topics include: Death and the Afterlife; Civic Art, Architecture and Public Space in Medieval Italy; Cultural Appropriation and Alterity in Medieval Art; and Image and Text in Medieval Manuscripts. Class alternates between lecture and discussion of current debates in the scholarly literature. Graduate students are required to write reading responses, a major research paper and give an oral presentation. Enroll Info: None
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 731 - TOPICS IN EARLY MODERN ART

3 credits.
This course encourages graduate students to think deeply and conduct innovative research on topics in Early Modern art. This course typically meets with intermediate to advanced level courses. The requirements include reading responses, a class presentation, and a final research paper. The meets-with courses include "Angels, Demons and Nudes: Early Netherlandish painting;" "Renaissances and Reformations;" "Death and Magic in Renaissance Art;" "The Artist as Scientist." Enroll Info: None Requisites: 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

## ART HIST 749 - TOPICS IN ARCHITECTURAL HISTORY

 3 credits.This graduate-level topics course typically meets with an intermediate to advanced level lecture course. However, the requirements for graduate students are different, consisting of journal entries, presentations, and a substantial research paper as well as attendance and participation in the lectures and activities. Topic varies but may include such topics as "History of American Vernacular Architecture and Landscapes;"
"Frank Lloyd Wright and Modernism" "Domestic Spaces;" and "Signature Buildings in World Architecture." Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## ART HIST 775 - TOPICS IN JAPANESE ART HISTORY

3 credits.
This course typically meets with an intermediate to advanced level lecture course. However, the requirements for graduate students are different, consisting of journal entries, presentations, and a substantial research paper. Meets-with courses include "Arts of Japan," "Japanese Ceramics and Allied Arts," and "Art and Religious Practice in Medieval Japan." Enroll Info: None
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 776 - TOPICS IN CHINESE ART HISTORY

3 credits.
This course typically meets with an intermediate to advanced level lecture course. However, the requirements for graduate students are different, consisting of journal entries, presentations, and a substantial research paper. Meets-with courses include " Early Chinese Art: From Antiquity to the Tenth Century," "Later Chinese Art: From Tenth Century to Contemporary," and "Topics in Asian Art." Enroll Info: None
Requisites: 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

## ART HIST 779 - TOPICS IN ARCHITECTURE \& URBANISM OF ASIA

 3 credits.This course typically meets with an intermediate to advanced level lecture course. However, the requirements for graduate students are different consisting of a substantial research paper in addition to course assignments. Meets-with courses includes "Cities of Asia." Enroll Info: None
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 797 - CURATORIAL STUDIES INTERNSHIPS (DIRECTED

 STUDY)3 credits.
This 3-credit directed study fulfills the requirement for the new graduate certificate program in Curatorial Studies, and will be specifically used to give students credit for applied learning experiences in museums and other curatorial settings. Students must identify internship possibilities and have them approved for credit by the faculty member who will serve as instructor of record, and oversee the academic side of the internship. The nature of the internship will vary according to the host institution, but to be accepted for credit, it must have a substantial research component. Examples include but are not limited to: curating an exhibition or permanent collection display; producing wall texts and object labels in an exhibition or permanent collection display; researching and writing a catalog essay or article on an object or objects in an exhibition or permanent collection; preparing catalog entries for works in the permanent collection of a museum/historical society; preparing a dossier for acquisitions; researching conservation histories of objects; preparing teaching materials associated with an exhibition or permanent collection either in print of online; participating in exhibition design; and assisting in editorial work for a museum/exhibition publication in print or online. To fulfill a 3-credit internship, the student must average approximately 12 hours a week throughout the semester, including working at the host institution on individual projects, and performing any necessary research and writing outside the host institution. In addition, the student should meet with the faculty advisor for a minimum of 1 hour each month. Enroll Info: None
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.
Enroll Info: None
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 HIST 800 - SEMINAR: SPECIAL TOPICS IN ART HISTORY 3 credits.

Enroll Info: None
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/AFROAMER 801 - HISTORIOGRAPHY, THEORY AND METHODS IN VISUAL CULTURE

3 credits.
Prepares student for graduate work in the transdisciplinary study of Visual Cultures by building on the knowledge, theories, and methods that are fundamental to the discipline. It will develop skills in critical reading, research, analysis, writing, and oral presentation. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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

## ART HIST 805 - SEMINAR-ANCIENT ART AND ARCHITECTURE

3 credits.

## Enroll Info: None

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

ART HIST 810 - SEMINAR IN ISLAMIC ART AND ARCHITECTURE 3 credits.

Rotating topics in Islamic art and architectural history. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

ART HIST 815 - SEMINAR-MEDIEVAL ART
3 credits.
Enroll Info: None
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 825 - SEMINAR-ITALIAN RENAISSANCE ART
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

ART HIST 835 - SEMINAR-NORTHERN EUROPEAN ART
3 credits.
Enroll Info: None
Requisites: 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.

Enroll Info: None
Requisites: 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
ART HIST 856 - GRADUATE SEMINAR IN TWENTIETH CENTURY EUROPEAN ART
3 credits.
Enroll Info: None
Requisites: 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 863 - SEMINAR IN MATERIAL CULTURE
3 credits.
Interdisciplinary study, at the graduate level, focusing on the way people use objects and environments to express identities and relationships in households, communities, and larger social/economic systems. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

ART HIST 865 - SEMINAR-AMERICAN ART
3 credits
Enroll Info: None
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.
Enroll Info: None
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
ART HIST 875 - SEMINAR IN JAPANESE ART
3 credits.
Enroll Info: None
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
Enroll Info: None
Requisites: 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
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. Enroll Info: None
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.
Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## ASIAN AM/AFROAMER/AMER IND/CHICLA/FOLKLORE 102 INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES <br> 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. Enroll Info: None
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 2020
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. Enroll Info:

## None

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: Summer 2020

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. Enroll Info: None
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: Fall 2020

## ASIAN AM 152 - ASIAN AMERICAN LITERARY AND POPULAR CULTURE: <br> RACE, FANTASY, FUTURES <br> 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, the course examines 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## ASIAN AM/HISTORY 161 - ASIAN AMERICAN HISTORY: SETTLEMENT AND NATIONAL BELONGING <br> 3-4 credits. <br> Examines the social, cultural, and political citizenship of Asians in the U.S. with particular emphasis on diaspora, transnationality, and place. Enroll Info: None <br> Requisites: None <br> Course Designation: Ethnic St - Counts toward Ethnic Studies <br> requirement <br> Breadth - Humanities <br> Level - Elementary <br> L\&S Credit - Counts as Liberal Arts and Science credit in L\&S <br> Repeatable for Credit: No <br> 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 selfdefinition and in making known their contributions to the advancement of U.S. society. Enroll Info: None

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: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Satisfied Communications A requirement
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: Fall 2020

## 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. Enroll Info: 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 2020
ASIAN AM/ENGL 270 - A SURVEY OF ASIAN AMERICAN LITERATURE 3 credits.

Survey of Asian American literature from 1880 to present. Enroll Info: None
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 2015

## ASIAN AM/ASIAN/E A STDS/HISTORY 276 - CHINESE MIGRATIONS SINCE 1500 <br> 3-4 credits.

Introduces the comparative history of Chinese migrations to the U.S. and world. Examines patterns of movement; imagined communities through cultural identity, citizenship, queerness, heritage tourism, studying abroad, and transnational adoption; as well as sites of cultural production such as food, literature, architecture, and cinema. Enroll Info: Sophomore standing or consent of instructor
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 2020
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. Enroll Info: COM ARTS/CHICLA 347 or So st 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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
ASIAN AM 440 - SPECIAL TOPICS IN THE ASIAN AMERICAN STUDIES PROGRAM
3 credits.
Topics vary for this course. Please see Asian American website for description for the semester you are taking the course. Topics will have some content about Asian Americans of different ethnic groups (e.g, Hmong, Southeast Asian, East Asian Americans -Japanese, Chinese, Korean, Indian, etc.). THIS COURSE DOES NOT PROVIDE ETHNIC STUDIES CREDIT. THIS COURSE MAY INCLUDE SERVICE LEARNING OR COMMUNITY BASED FIELD STUDIES ACTIVITIES. Enroll Info: None Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## ASIAN AM 441 - HMONG AMERICAN SOCIAL MOVEMENTS IN THE 20TH AND 21ST CENTURIES <br> 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. Enroll Info: None
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 2020
ASIAN AM/AFROAMER 443 - MUTUAL PERCEPTIONS OF RACIAL MINORITIES
3 credits.
Survey course on the mutual perceptions of primarily people of African and Asian ancestry. It focuses on how these groups evaluate perceive and interact with one another and others such as Native Americans, whites and Hispanics. Social psychological perspectives are highlighted as is an international overview. Enroll Info: Afro-Amer 151 or 673
Requisites: None
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 2019
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. Enroll Info: None
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: Spring 2020

## ASIAN AM/ENGL/GEN\&WS 463 - RACE AND SEXUALITY IN AMERICAN LITERATURE <br> 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. Enroll Info: None 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. Enroll Info: None 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. Enroll Info: None
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 2019

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. Enroll Info: None
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 2020

## ASIAN AM 560 - HUMANITIES TOPICS

3 credits.

Topics in the arts and humanities that illuminate the Asian American experience. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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 2014

## ASIAN AM 699 - INDEPENDENT STUDY: DIRECTED READINGS IN ASIAN AMERICAN STUDIES <br> 1-4 credits.

An independent studies course to allow students at an advanced level to pursue individual projects/subjects. Enroll Info: 9 cr in Asian American 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 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. Enroll Info:

## None

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

ASIAN/E A STDS/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. Enroll Info: None
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
ASIAN/E A STDS/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. Enroll Info: None 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
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 21 st century. Enroll Info: None
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 <br> 3 credits. <br> 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. Enroll Info: None <br> Requisites: None <br> Course Designation: Breadth - Either Humanities or Social Science Level - Elementary <br> L\&S Credit - Counts as Liberal Arts and Science credit in L\&S <br> Repeatable for Credit: No <br> Last Taught: Fall 2020

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. Enroll Info: None
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 <br> 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. Enroll Info: None
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 creditsStudy 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. Enroll Info: None
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

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. Enroll Info: None
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
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 21 st century, including an exposure to region's contemporary literature. Enroll Info: 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 2020

## ASIAN/ASIAN AM/HISTORY 246 - SOUTHEAST ASIAN REFUGEES OF THE "COLD" WAR <br> 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. Enroll Info: 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 2020

## 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. Enroll Info: Not open to students with credit for LCA 252 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: 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. Enroll Info: Not open to students with credit for E ASIAN 253 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: Spring 2019

## ASIAN/E A STDS/HISTORY/POLI SCI 255 - INTRODUCTION TO EAST

 ASIAN CIVILIZATIONS3-4 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. Enroll Info: None
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

## 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. Enroll Info: 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
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. Enroll Info: None
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 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. Enroll Info: 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

## ASIAN/ASIAN AM/E A STDS/HISTORY 276 - CHINESE MIGRATIONS SINCE 1500 <br> 3-4 credits.

Introduces the comparative history of Chinese migrations to the U.S. and world. Examines patterns of movement; imagined communities through cultural identity, citizenship, queerness, heritage tourism, studying abroad, and transnational adoption; as well as sites of cultural production such as food, literature, architecture, and cinema. Enroll Info: Sophomore standing or consent of instructor
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 2020

## ASIAN 277 - KENDO: INTEGRATION OF MARTIAL ARTS AND LIBERAL

 ARTS2 credits.
Kendo practice (martial art) supplemented by lecture describing its historical roots and philosophical background. Enroll info: Not open to students with credit for E ASIAN 277 prior to Fall 2019.
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 2019

## ASIAN 299 - DIRECTED STUDY

1-3 credits.
Directed study projects for undergraduate students as arranged with a faculty member. Enroll Info: None
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
ASIAN 300 - TOPICS IN ASIAN STUDIES
3 credits.
Selected topics in the study of Asian Languages and Cultures. Enroll Info: None
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

## ASIAN/E A STDS 301 - SOCIAL STUDIES TOPICS IN EAST ASIAN STUDIES <br> 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. Enroll Info: None
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 2020
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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: Not open to students with credit for LCA 421 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 2020

## 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. Enroll Info: 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 2019

## ASIAN 310 - INTRODUCTION TO COMICS AND GRAPHIC NOVELS: THEORY, HISTORY, METHOD <br> 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. Enroll Info: None
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

## 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. Enroll Info: 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\&S Credit - Counts 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/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. Enroll Info:
None
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 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. Enroll Info: None
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/E A STDS/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. Enroll Info: None 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 2017
ASIAN/E A STDS/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. Enroll Info: None
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 2017
ASIAN/E A STDS/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. Enroll Info: So st
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 2020
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. Enroll Info: 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. Enroll Info: Not open to students who completed E ASIAN 351 prior to Fall 2019.

Requisites: ASIALANG 102 (or E ASIAN 102 prior to Fall 2019) 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 2019
ASIAN 352 - SURVEY OF MODERN CHINESE LITERATURE 3 credits.

A critical introduction to the literature of China from the 19th through the 21 st centuries. Works include poetry, prose, fiction and drama and film adaptations. Enroll Info: 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)
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
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. Enroll Info: 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). 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 2019

## 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? Enroll Info: 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 2020

## ASIAN 355 - MODERN JAPANESE LITERATURE

3 credits.

Covers Japanese literature from the late nineteenth through the present century. Enroll Info: 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)

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

## ASIAN 358 - LANGUAGE IN JAPANESE SOCIETY

3 credits.
Exploration of dynamic relationships between the language and the social structure in Japan. Study of films, TV programs, and conversations as well as research articles. Basic knowledge of Japanese is assumed, but the instruction is in English. Enroll Info: 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)

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

## 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). Enroll Info: 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 2020

## ASIAN/RELIG ST 362 - INTRODUCTION TO CONFUCIANISM

3 credits.

The development of Confucianism in pre-Buddhist China emphasizing interactions with competing viewpoints. Particular attention to issues of morality and human nature, stressing the roots of Confucianism in more general theories of value. All readings in translation. Enroll Info: Not open to students with credit for RELIG ST 363 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 2014

## ASIAN/E A STDS/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. Enroll Info: None
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 2017

## 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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S

## Repeatable for Credit: No

Last Taught: Spring 2019
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. Enroll Info: 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

## 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. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: 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

## 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. Enroll Info: Current enrollment in a UWMadison 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

## 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. Enroll Info: Not open to students with credit for E ASIAN 520 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
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. Enroll Info: 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)
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. Enroll Info: 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)
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

## 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. Enroll Info: 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 2020

## 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. Enroll Info: 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 2019

## 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. Enroll Info: 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 2019

## ASIAN/RELIG ST 430 - INDIAN TRADITIONS IN THE MODERN AGE

 3 creditsExplores how ancient Indian traditions have been reframed for the modern age. Topics include the Ramayama 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. Enroll Info: None
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 431 - CHINESE LINGUISTICS I

3 credits
Provides an overview of the Chinese language from historical and contemporary perspectives. It will focus on phonetics and phonology (the sound system), dialectology, and orthography (the writing system). The mastery of the knowledge learned in this course is essential for further study in Chinese linguistics. Since the study of Chinese linguistics is often abstract and counterintuitive, you can expect to sharpen your critical and analytical thinking skills throughout this course. Not open to students who completed E ASIAN 431 prior to Fall 2019.

Requisites: ASIALANG 202 (or E ASIAN 202 prior to Fall 2019) or ASIALANG 358 (or E ASIAN 318 prior to Fall 2019)
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 2019

## ASIAN 432 - CHINESE LINGUISTICS II

3 credits.

Provides an overview of the Chinese language from historical and contemporary perspectives. It will focus on morphology, syntax, semantics and pragmatics. The mastery of the knowledge learned in this course is essential for further study in Chinese linguistics. Since the study of Chinese linguistics is often abstract and counter intuitive, you can expect to sharpen your critical and analytical thinking skills throughout this course. Enroll Info: Not open to students with credit for E ASIAN 432 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 2018

## 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. Enroll Info: None
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 2020
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)

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

## ASIAN/HISTORY/RELIG ST 438 - BUDDHISM AND SOCIETY IN SOUTHEAST ASIAN HISTORY

3-4 credits
Therevada 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. Enroll Info: 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

## ASIAN/RELIG ST 444 - INTRODUCTION TO SUFISM (ISLAMIC MYSTICISM) <br> 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. Enroll Info: 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

## ASIAN/E A STDS/HISTORY 454 - SAMURAI: HISTORY AND IMAGE

 3-4 credits.Japanese warriors, their ideals, and their images from the tenth century to the present. Enroll Info: None
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 2016
ASIAN/E A STDS/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. Enroll Info: None
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. Enroll Info: 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 2017

## ASIAN/RELIG ST 460 - THE HISTORY OF YOGA

3 credits.

Explores the history of Yoga techniques from the ancient to the modern period. Enroll Info: Not open to students with credit for RELIG ST 623 prior to Spring 2019.
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 2020

## ASIAN/HISTORY 463 - TOPICS IN SOUTH ASIAN HISTORY

3 credits
Topics vary related to the History of South Asia, Eurasia, and the Indian Ocean. Enroll Info: None
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. Enroll Info: 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 <br> 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. Enroll Info: Not open to students with credit for LCA 624 prior to Fall 2019.
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 2020
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. Enroll Info: 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 <br> 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. Enroll Info: None
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 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. Enroll Info: None
Requisites: ASIALANG 404 and 313 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 2020
ASIAN 563 - READINGS IN MODERN JAPANESE LITERATURE 3 credits.

Extensive readings in modern Japanese literature and discussion of literary content. Enroll Info: Students may repeat this course if the topic is different.
Requisites: ASIALANG 404 (or E ASIAN 404 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: Yes, unlimited number of completions
Last Taught: Fall 2018

## ASIAN 568 - STUDY ABROAD IN RELIGIONS AND PHILOSOPHIES

 2-6 credits.Study of religions and philosophies offered by a UW-approved studyabroad program outside the United States. Enroll Info: None
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
ASIAN 571 - READINGS IN CLASSICAL CHINESE LITERATURE 1-3 credits.

Extensive readings in classical Chinese literature, including poetry and prose. Enroll Info: 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\&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 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. Enroll Info: Students may repeat this course if the topic is different.
Requisites: ASIALANG 404 (or E ASIAN 404 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: Yes, unlimited number of completions Last Taught: Spring 2020

## 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. Enroll Info: None
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: Spring 2016

ASIAN/RELIG ST 620 - PROSEMINAR: STUDIES IN RELIGIONS OF ASIA 3 credits.

Historical and structural analysis and discussion of specific topics in one or more religions of Asia. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Spring 2013

## ASIAN/ART HIST 621 - MAPPING, MAKING, AND REPRESENTING COLONIAL SPACES <br> 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. Enroll Info: 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: Spring 2017
ASIAN 630 - PROSEMINAR: STUDIES IN CULTURES OF ASIA 3 credits.

Advanced topics in Asian studies. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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)
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

## 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. Enroll Info: None
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 2020

## ASIAN 641 - HISTORY OF CHINESE LITERATURE

3 credits.
Covers the history of Chinese Literature from the early Zhou times through the May Fourth Movement and includes introduction to poetry and prose. Enroll Info: Not open to students with credit for E ASIAN 651 prior to Fall 2019.
Requisites: ASIAN 351 (or E ASIAN 351 prior to Fall 2019) 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

## ASIAN 642 - HISTORY OF CHINESE LITERATURE II

3 credits

Covers the history of Chinese-language literature from the late imperial period though 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. Enroll Info: None Requisites: ASIAN 351 or 352
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

## 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.
Enroll Info: None
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 2017

## 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.
Enroll Info: 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. Enroll Info: 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: Fall 2020

## 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 2017
ASIAN 682 - SENIOR HONORS THESIS
3 credits.
Second semester is devoted to writing the thesis paper under the guidance of a faculty advisor. Enroll Info: 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 2018

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## ASIAN 699 - DIRECTED STUDY

2-3 credits.
Offers the student an opportunity to work with a faculty member on an individual study program. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: 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: Spring 2020

## 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. Enroll Info: 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 2019

## 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. Enroll Info: 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 2020
ASIAN 741 - STUDIES IN CHINESE SYNTAX AND MORPHOLOGY
3 credits
Syntax and morphology of a selected corpus of Chinese texts. Enroll Info: None
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
Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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

## ASIAN 775 - JAPANESE APPLIED LINGUISTICS

3 credits
One of the general fields such as discourse analysis, sociolinguistics, pragmatics, language pedagogy, etc. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
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
ASIAN 802 - SEMINAR: TOPICS IN RELIGIONS OF ASIA
3 credits.
Topics in comparative and connected histories of religion in Asia; major thinkers and movements; theoretical and methodological issues; and/or specialized subjects in religious studies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

## ASIAN 815 - SEMINAR: INTERDISCIPLINARY APPROACHES TO ASIA

3 credits.
An overview of current research being done on Asia in a variety of different disciplines. Enroll Info: None
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 visuality in China, Japan, and Korea. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None 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 951 - SEMINAR IN CHINESE LITERATURE

3 credits.
Rotating subjects in the study of Chinese Literature. Enroll Info: None
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

## ASIAN 971 - SEMINAR IN CHINESE THOUGHT

3 credits.
Rotating subjects relating to Chinese philosophies and religions. Enroll Info: None
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. Enroll Info: None
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

## ASIAN 999 - INDEPENDENT RESEARCH

1-3 credits.
Independent research for graduate students. Enroll Info: None 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

## 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. Enroll Info: None
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 2020

## ASIALANG 102 - SECOND SEMESTER CHINESE

4 credits.
Introduces the basic grammar along with 400 Chinese characters of standard spoken Chinese. Enroll Info: 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). 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 2020

## 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. Enroll Info: 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 2020
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. Enroll Info: 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)

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
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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## ASIALANG 106 - SECOND SEMESTER KOREAN

4 credits
Essentials of modern spoken and written Korean. Enroll Info: Students with prior experience in the language are required to take a placement test administered by the department. Enroll Info: Not open to students with credit for E ASIAN 106 prior to Summer 2019
Requisites: ASIALANG 105 (E ASIAN 105 prior to Summer 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 2020

## ASIALANG 110 - ELEMENTARY CHINESE I

2 credits.

Introduction to the fundamental phonetic system and grammar of standard spoken Chinese along with 200 characters. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## ASIALANG 111 - ELEMENTARY CHINESE II

2 credits.

Introduction to the fundamental phonetic system and grammar of standard spoken Chinese along with 200 characters. Enroll Info: 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). 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
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None

Requisites: Not open to students with credit for ASIALANG 103 (or E ASIAN 103 prior to Summer 2019)
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll info: 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). 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## ASIALANG 121 - FIRST SEMESTER ASIAN LANGUAGE

 4 credits.Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: None
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: Summer 2020
ASIALANG 122 - SECOND SEMESTER ASIAN LANGUAGE 4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## ASIALANG 123 - FIRST SEMESTER FILIPINO

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 2020

## ASIALANG 124 - SECOND SEMESTER FILIPINO

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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
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

## ASIALANG 125 - FIRST SEMESTER HMONG

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 2020

## ASIALANG 126 - SECOND SEMESTER HMONG

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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
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

## ASIALANG 127 - FIRST SEMESTER INDONESIAN

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: Not open to students with credit for LCA LANG 309 prior to Fall 2019.
Requisites: None
Course Designation: Frgn Lang - 1 st 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

## ASIALANG 128 - SECOND SEMESTER INDONESIAN

 4 credits.Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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

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

## ASIALANG 129 - FIRST SEMESTER THAI

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 2020

## ASIALANG 130 - SECOND SEMESTER THA

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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
ASIALANG 131 - FIRST SEMESTER VIETNAMESE
4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

ASIALANG 132 - SECOND SEMESTER VIETNAMESE
4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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
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

## ASIALANG 133 - FIRST SEMESTER HINDI

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: Not open to students with credit for LCA LANG 353 prior to Fall 2019.
Requisites: None
Course Designation: Frgn Lang - 1 st 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

## ASIALANG 134 - SECOND SEMESTER HINDI

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 135 - FIRST SEMESTER MODERN TIBETAN

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: Not open to students with credit for LCA LANG 369 prior to Fall 2019.
Requisites: None
Course Designation: Frgn Lang - 1 st 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

## ASIALANG 136 - SECOND SEMESTER MODERN TIBETAN

 4 credits.Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 137 - FIRST SEMESTER PERSIAN

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## ASIALANG 138 - SECOND SEMESTER PERSIAN

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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
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
ASIALANG 139 - FIRST SEMESTER URDU
4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 2020

## ASIALANG 140 - SECOND SEMESTER URDU

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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
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

## ASIALANG 141 - FIRST SEMESTER SANSKRIT

3-4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing using communicative approaches. Enroll Info: 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 2020
ASIALANG 142 - SECOND SEMESTER SANSKRIT
3-4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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: Summer 2018

## ASIALANG 143 - FIRST SEMESTER BURMESE

4 credits.
Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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. Enroll Info: 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
\&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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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) Not open to students with credit for E ASIAN 201 prior to Fall 2019.

Course Designation: Frgn Lang - 3rd semester language course Level - Intermediate
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: 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). 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: Summer 2020

## 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. Enroll Info: 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)

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

## 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. Enroll Info: 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)
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 2020

## 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. Enroll Info: 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)
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

## ASIALANG 206 - FOURTH SEMESTER KOREAN

4 credits.

Further practice in speaking, reading and writing Korean. Enroll Info: 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)
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 2020

## ASIALANG 211 - HERITAGE CHINESE I

3 credits.
Introduces functional vocabulary and grammar, various cultural related topics, reading skills, and writing techniques. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## ASIALANG 221 - THIRD SEMESTER ASIAN LANGUAGE

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2018

## ASIALANG 222 - FOURTH SEMESTER ASIAN LANGUAGE

 4 credits.Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2018

## ASIALANG 223 - THIRD SEMESTER FILIPINO

4 credits.

Proficency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 224 - FOURTH SEMESTER FILIPINO

4 credits.
Proficency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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
ASIALANG 225 - THIRD SEMESTER HMONG
4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 226 - FOURTH SEMESTER HMONG

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 227 - THIRD SEMESTER INDONESIAN

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 228 - FOURTH SEMESTER INDONESIAN

4 credits
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 229 - THIRD SEMESTER THAI

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 230 - FOURTH SEMESTER THAI

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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
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

## ASIALANG 231 - THIRD SEMESTER VIETNAMESE

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 232 - FOURTH SEMESTER VIETNAMESE

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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
ASIALANG 233 - THIRD SEMESTER HINDI
4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 234 - FOURTH SEMESTER HINDI

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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
ASIALANG 235 - THIRD SEMESTER MODERN TIBETAN 4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 236 - FOURTH SEMESTER MODERN TIBETAN

 4 credits.Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 237 - THIRD SEMESTER PERSIAN

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 238 - FOURTH SEMESTER PERSIAN

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 2020

## ASIALANG 239 - THIRD SEMESTER URDU

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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

## ASIALANG 240 - FOURTH SEMESTER URDU

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 472 prior to Fall 2019.
Requisites: ASIALANG 140 (or LCA LANG 372 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 2020

## ASIALANG 241 - THIRD SEMESTER SANSKRIT

3-4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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: Summer 2018

## ASIALANG 242 - FOURTH SEMESTER SANSKRIT

3-4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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: Summer 2018

## ASIALANG 243 - THIRD SEMESTER BURMESE

4 credits.
Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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)
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 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. Enroll Info: 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)
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 2020

## 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. Enroll Info: 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)
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 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. Enroll Info: 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)
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. Enroll Info: 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)
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 306 - SIXTH SEMESTER KOREAN

3 credits.
Further practice in reading and writing. Extensive as well as intensive readings in contemporary texts. Conducted in Korean. Enroll Info:
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)
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 2020

## ASIALANG 307 - FIRST SEMESTER SOUTHEAST ASIAN LANGUAGE

 4 credits.Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None Requisites: Enrolled 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 2020
ASIALANG 308 - SECOND SEMESTER SOUTHEAST ASIAN LANGUAGE 4 credits.

Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020

## 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. Enroll Info: 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). 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 2019
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. Enroll Info: 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 2020
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. Enroll Info: 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)

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

## 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. Enroll Info: 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 2019

## ASIALANG 316 - SECOND SEMESTER CLASSICAL CHINESE FOR CHINESE SPEAKERS <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Enrolled in South Asia Summer Language Institute
Course Designation: Frgn Lang - 1 st 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 2020

## ASIALANG 321 - FIFTH SEMESTER ASIAN LANGUAGE

 3 credits.Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: Students with prior experience in the language are required to take a placement test administered by the department.
Requisites: ASIALANG 222 (or LCA LANG 402 prior to 2019)
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 2012

## ASIALANG 323 - FIFTH SEMESTER FILIPINO

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 324 - SIXTH SEMESTER FILIPINO

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 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: Spring 2019

## ASIALANG 325 - FIFTH SEMESTER HMONG

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 2020

## ASIALANG 326 - SIXTH SEMESTER HMONG

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 2020
ASIALANG 327 - SECOND SEMESTER SOUTH ASIAN LANGUAGE 4 credits.

Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None Requisites: Enrolled in South Asia Summer Language 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 2020
ASIALANG 328 - SIXTH SEMESTER INDONESIAN
3-4 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 2020

## ASIALANG 329 - FIFTH SEMESTER THAI

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 330 - SIXTH SEMESTER THAI

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 2020

## ASIALANG 331 - FIFTH SEMESTER VIETNAMESE

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using commnicative approaches. Enroll Info: 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)
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 332 - SIXTH SEMESTER VIETNAMESE

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using commnicative approaches. Enroll Info: 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)
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 2020

## ASIALANG 333 - FIFTH SEMESTER HIND

3-4 credits
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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. Enroll Info: 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)
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 2020

## ASIALANG 335 - FIFTH SEMESTER TIBETAN

4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2012

## ASIALANG 336 - SIXTH SEMESTER TIBETAN

4 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: None
Requisites: ASIALANG 238 or 358 (or LCA LANG 464 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: Fall 2020

## 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. Enroll Info: None
Requisites: ASIALANG 337 (or LCA LANG 563 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 2020

## ASIALANG 339 - FIFTH SEMESTER URDU

$3-4$ credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 340 - SIXTH SEMESTER URDU
3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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 2020

## ASIALANG 341 - ELEMENTARY SUMMER IMMERSION PERSIAN

 8 credits.Elementary level language taught in a residential summer language immersion format. Enroll Info: Open only to students who have been admitted to the Arabic Persian Turkish Language Immersion Institute at UW-Madison.
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 2019

## ASIALANG 343 - FIFTH SEMESTER BURMESE

3 credits.
Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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)
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 2019

## ASIALANG 355 - FIRST SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS <br> 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. Enroll Info: 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 2020

## ASIALANG 356 - SECOND SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS <br> 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. Enroll Info: May be repeated if enrolled in a different language.
Requisites: ASIALANG 355
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: May be repeated if enrolled in a different language.
Requisites: ASIALANG 356
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## ASIALANG 358 - FOURTH SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS <br> 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. Enroll Info: May be repeated if enrolled in a different language.
Requisites: ASIALANG 357
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2020

## ASIALANG 360 - INTERMEDIATE READING PROFICIENCY IN ASIAN LANGUAGES <br> 4 credits.

Reinforces the skills of reading various genres of Asian target-language writings. Enroll Info: 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 373 - ADVANCED READINGS IN JAPANESE I

3 credits.
Enhance students' Japanese proficiency through reading and related activities. Introduces a variety of short texts in Japanese, such as essays, newspaper columns, and short stories, which enhance the students' understanding of the Japanese society and culture. Primarily focus on reading comprehension but also provide opportunities to improve their ability to express their viewpoints through writing and speaking in Japanese. Enroll Info: None
Requisites: ASIALANG 303 (or E ASIAN 303 prior to Summer 2019)
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

## 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. Enroll Info: 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)
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 2020

ASIALANG/E P D 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. Enroll Info: 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)
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## ASIALANG 378 - CHINESE CONVERSATION

3 credits.
Introduces students to oral communication skills including verbal and nonverbal behavior in Mandarin Chinese. Student will acquire useful terms and phrases for daily conversations and professional reports, and learn how to converse and interact appropriately in varying real-life situations. Enroll Info: 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 333 prior to Fall 2019.
Requisites: ASIALANG 202 (or E ASIAN 202 prior to Fall 2019)
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 2020

## 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. Enroll Info: 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)

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
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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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 404 - EIGHTH 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. Enroll Info: 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 404 prior to Summer 2019

Requisites: ASIALANG 403 (E ASIAN 403 prior to Summer 2019)
Course Designation: Breadth - Humanities
Frgn Lang -5th + semester language course
Level - Advanced
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: 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)
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 2020

## 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. Enroll Info: 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)
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 2020
ASIALANG 407 - THIRD SEMESTER SOUTHEAST ASIAN LANGUAGE 4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020

ASIALANG 408 - FOURTH SEMESTER SOUTHEAST ASIAN LANGUAGE 4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020

## ASIALANG 417 - THIRD SEMESTER SOUTH ASIAN LANGUAGE

 4 credits.Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None Requisites: Enrolled 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 2020

ASIALANG 421 - SEVENTH SEMESTER ASIAN LANGUAGE 3-4 credits.

Proficiency at the advanced high level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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 2020

## ASIALANG 422 - EIGHTH SEMESTER ASIAN LANGUAGE

3-4 credits.
Proficiency at the advanced high level in listening, speaking, reading and writing, using communicative approaches. Enroll Info: 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)
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
ASIALANG 427 - FOURTH SEMESTER SOUTH ASIAN LANGUAGE 4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020

## ASIALANG 441 - INTERMEDIATE SUMMER IMMERSION PERSIAN

 8 credits.Intermediate level language taught in a residential summer language immersion format. Enroll Info: Open only to students who have been admitted separately to the Arabic Persian Turkish Language Immersion Institute at UW-Madison.
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 2019

## ASIALANG 450 - ADVANCED READINGS IN JAPANESE II

3 credits.
Enhance students' Japanese proficiency through reading and related activities. Primarily focusing on reading comprehension but also provide opportunities to improve student's ability to express their viewpoints through writing and speaking in Japanese. Enroll Info: None
Requisites: ASIALANG 373
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

## ASIALANG 452 - ADVANCED JAPANESE THROUGH AUDIO-VISUAL MEDIA <br> 3 credits.

Enhance students' Japanese language proficiency through the study of various genres of audio-visual media, including drama, news, documentary, talk/variety show, and commercials. Primarily focus on the development of listening comprehension and media literacy, but also provide opportunities to improve their ability to express their viewpoints through writing and speaking in Japanese. Enroll Info: None
Requisites: ASIALANG 303 (or E ASIAN 303 prior to Summer 2019)
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## ASIALANG 453 - ADVANCED READINGS IN CHINESE II

3 credits.
Designed for advanced-mid learners of Chinese. It introduces more advanced and sophisticated vocabulary and sentence patterns, advanced reading skills, and advanced writing techniques. Topics are related to social developments and complex social issues that need to be handled in contemporary China. Enroll Info: None
Requisites: ASIALANG 374
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

## 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. Enroll Info: None
Requisites: ASIALANG 301 (or E ASIAN 301 prior to Fall 2019)
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

## ASIALANG 460 - INTERMEDIATE HIGH READING PROFICIENCY IN

 ASIAN LANGUAGES4 credits.

Reinforces the skills of reading various genres of Asian target-language writings. Enroll Info: 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. Topics include classical Japanese manuscripts, The Dream of the Red Chamber, etc. Enroll Info: None
Requisites: ASIALANG 301 or 303
Course Designation: Frgn Lang - 5th + semester language course Grad 50\% - Counts toward 50\% graduate coursework requirement Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## ASIALANG 501 - FIFTH-YEAR CHINESE

3 credits.
Extensive readings in advanced general and specialized texts in contemporary Chinese, and discussion on the content of the reading materials. Emphasis on reading with speed a variety of Chinese texts with discussion in Chinese. Enroll Info: 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 501 prior to Fall 2019.

Requisites: ASIALANG 402 (or E ASIAN 402 prior to Fall 2019) 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 2012

ASIALANG 507 - FIFTH SEMESTER SOUTHEAST ASIAN LANGUAGE 4 credits

Proficiency at the advanced-low level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020

## ASIALANG 508 - SIXTH SEMESTER SOUTHEAST ASIAN LANGUAGE

 4 credits.Proficiency at the advanced-low level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None Requisites: Enrolled 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 2020

## ASIALANG 517 - FIFTH SEMESTER SOUTH ASIAN LANGUAGE

4 credits.
Proficiency at the advanced level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020

## ASIALANG 527 - SIXTH SEMESTER SOUTH ASIAN LANGUAGE

 4 creditsProficiency at the advanced level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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 2020
ASIALANG 541 - ADVANCED SUMMER IMMERSION PERSIAN 8 credits.

Advanced level language taught in a residential summer language immersion format. Enroll Info: Open only to students who have been admitted separately to the Arabic Persian Turkish Language Immersion nstitute at UW-Madison.
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

## ASIALANG 560 - ADVANCED READING PROFICIENCY IN ASIAN LANGUAGES <br> 4 credits.

Reinforces the skills of reading various genres of Asian Languages writings. Enroll Info: 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
ASIALANG 607 - SEVENTH SEMESTER SOUTHEAST ASIAN LANGUAGE 4 credits.

Proficiency at the advanced-high level in listening, speaking, reading, and writing, using communicative approaches. Enroll Info: None
Requisites: Enrolled 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. Enroll Info: None
Requisites: Enrolled 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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)
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Spring 2020

## 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. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## ASTRON 199 - DIRECTED STUDY

1-3 credits.

Introductory mentored independent study as arranged with faculty. Enroll Info: None
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 2017

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None Requisites: None
Course Designation: Gen Ed - Communication 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 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 222 and (PHYSICS 205, 241, or 249, 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 2020

## 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. Enroll Info: None 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 2018
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. Enroll Info: None
Requisites: MATH 222 and (PHYSICS 205, 241, or 249, 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: Spring 2020

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Declared in Astronomy-Physics
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

## ASTRON 500 - TECHNIQUES OF MODERN OBSERVATIONAL ASTROPHYSICS <br> 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. Enroll Info: None
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 2020

## ASTRON 510 - RADIO ASTRONOMY LABORATORY

2 credits
An introduction to the techniques of modern observational radio astronomy. The course covers fundamentals of radio astronomy, modern radio instrumentation, and observing techniques, through a mixture of classroom lectures, discussions, and hands-on observational projects with a small radio telescope. Enroll Info: None
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: Spring 2012
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. Enroll Info: None
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 2020

## ASTRON 620 - SEMINAR IN ASTROPHYSICAL TOPICS

1-3 credits.
Current problems; topic changes. Enroll Info: None
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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## ASTRON 691 - SENIOR THESIS

2-3 credits.
Individual study for seniors completing theses as arranged with a faculty member. Enroll Info: None
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

## ASTRON 692 - SENIOR THESIS

2-3 credits.
Individual study for seniors completing theses as arranged with a faculty member; continuation of ASTRON 691. Enroll Info: None
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
ASTRON 699 - DIRECTED STUDY
1-6 credits.
Directed study projects for juniors and seniors as arranged with a faculty member. Enroll Info: None
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 2020

## ASTRON 700 - BASIC ASTROPHYSICS

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
ASTRON/PHYSICS 910 - SEMINAR IN ASTROPHYSICS
0-1 credits.
Current topics in astrophysics. Enroll Info: None
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

## ASTRON 920 - SEMINAR-ASTROPHYSICAL TOPICS

1-3 credits.
Current problems; topic changes. Enroll Info: None
Requisites: 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.
Enroll Info: None
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: Fall 2020

## ASTRON 999 - ADVANCED INDEPENDENT READING

1-2 credits.
Advanced level mentored reading and research for graduate students.
Enroll Info: None
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 2008

## ATMOSPHERIC AND OCEANIC SCIENGES (ATM OCN)

## ATM OCN 100 - WEATHER AND CLIMATE

3 credits.
Nature and variability of wind, temperature, cloud and precipitation. Storm systems, fronts, thunderstorms, tornadoes and their prediction. Air composition and pollution. Global winds, seasonal changes, climate and climatic change. Enroll Info: Open to Fr. Stdts may not receive cr for both ATM OCN 100101
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 2020

## ATM OCN 101 - WEATHER AND CLIMATE

4 credits.
Nature and variability of wind, temperature, clouds and precipitation. Discussion session will include map analyses and basic quantitative lab exercises. Storm systems, fronts, thunderstorms, tornadoes and their prediction. Air composition and pollution. Global winds, seasonal changes, climate and climatic change. Enroll Info: Open to Fr. Stdts may not receive cr for both ATM OCN 100101
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 2020

## ATM OCN/ENVIR ST/GEOSCI 102 - CLIMATE AND CLIMATE CHANGE

 3 credits.This course 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: High school physics or chem recommended. Open to Freshmen
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 2020
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.
Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

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? The course will also address hazard assessment, forecasting, and mitigation to lessen their impact on society. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: PHYSICS 208 or con reg MATH 234 or con reg 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
Last Taught: Fall 2020

## 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. Enroll Info: ATM OCN 310, 330
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
Last Taught: Spring 2020
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. Enroll Info: None
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

## ATM OCN/GEOG 323 - SCIENCE OF CLIMATE CHANGE

 3 credits.This is a calculus-based treatment of climate system physics and the mechanisms of modern-day anthropogenic climate change. By the end of this course, students will understand: a. How solar radiation and rotating fluid dynamics determine the basic climate state; b. Mechanisms of natural variability and change in climate; c. Why anthropogenic climate change is occurring; and $d$. Which scientific uncertainties are most important to estimates of 21 st century change. Enroll Info: None
Requisites: PHYS 103, 201 or 207; and MATH 217, 221 or 275. Not open to students who have enrolled in 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. Enroll Info: PHYSICS 208 or con reg MATH 234 or con reg 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
Last Taught: Fall 2020

## ATM OCN/ENVIR ST/GEOG 332 - GLOBAL WARMING: SCIENCE AND IMPACTS <br> 3 credits.

Climate change is underway and will continue into the foreseeable future. This course offers a fundamental understanding of how and why global warming is happening, and what to expect in the future. Together, we will 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. Enroll Info: Geog/IES 120 or 127 or ATM OCN 100 or equivalent recommended. Freshmen permitted only 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## ATM OCN/ENVIR ST/GEOG/GEOSCI 335 - CLIMATIC ENVIRONMENTS OF THE PAST <br> 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. Enroll Info: None
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 2020
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. Enroll Info: Atmospheric-Oceanic 330
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
Last Taught: Spring 2020
ATM OCN/ENVIR ST 355 - INTRODUCTION TO AIR QUALITY
3 credits.

Air pollution is a complex environmental challenge, because it links chemistry and meteorology to engineering, law, policy, and public health. This class presents key ideas in air quality, with the goal of providing students from a range of backgrounds with a solid foundation in air quality to support a range of educational and career goals. This class will focus on reactive pollutants in the outdoor environment, especially gas and particle phase chemicals that react with human tissue to cause sickness and death. We will discuss the 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 for completeness. Non-reactive pollutants, especially carbon dioxide, will be discussed throughout the class to compare and contrast with reactive air pollutants. Students will complete a research-based project to develop skills relevant to air quality analysis. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ATM OCN 401 - TOPICS IN METEOROLOGY

2-3 credits.
Special topics to be given as the need and opportunity arise. May be repeated for credit. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2020

## ATM OCN 405 - AOS SENIOR CAPSTONE SEMINAR

1 credit.
Required senior seminar for AOS majors provides a synthesis and overview. Research on a topic of the student's choosing is presented at the end. Enroll Info: ATM OCN 310, 311, 330, 340
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: Spring 2020
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. Enroll Info: ATM OCN 311, 340, or cons inst
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
Last Taught: Fall 2020

## ATM OCN 441 - RADAR AND SATELLITE METEOROLOGY

3 credits.
Provides undergraduate students with the necessary knowledge about radar and satellite meteorology. Enroll Info: ATM OCN 340 or cons inst 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: Spring 2020

## 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. Enroll Info: ATM OCN 311 340, or cons inst
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
Last Taught: Fall 2020

## 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. Enroll Info: ATM OCN 311 340, or cons inst
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
Last Taught: Spring 2020

## ATM OCN 455 - SEVERE STORM FORCASTING AND OBSERVATION

1 credit.
Application of severe storm forecasting and nowcasting techniques under operational conditions. Severe storm observation and photography (storm chasing), application in the field. Enroll Info: ATM OCN 453 or cons inst
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: Summer 2011

## ATM OCN 508 - TEACHER WORKSHOP IN SATELLITE METEOROLOGY

 1-2 creditsThis workshop is designed to address the professional development needs for K -12 science teachers. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2014

## ATM OCN 509 - TEACHER WORKSHOP IN EARTH SYSTEM SCIENCE WEB <br> 1-3 credits

These courses are designed to address the professional development needs for $\mathrm{K}-12$ science teachers in the earth and space sciences. Topics will be designed to meet the Wisconsin State Science standards and be presented by science and education experts. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2013
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. Enroll Info: Junior standing and ATM OCN 101, ATM OCN 252 or ATM OCN/GEOG 323, and BIOLOGY/ BOTANY/ZOOLOGY 152
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
Grad 50\% - Counts toward 50\% graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: ATM OCN 311, 340
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ATM OCN/ENVIR ST/GEOG 528 - PAST CLIMATES AND CLIMATIC CHANGE <br> 3 credits.

Climatic change throughout geologic time, especially in the last 10 millennia; mechanisms of change, evidence, and criteria, paleogeography and paleoclimatology, climate models. Enroll Info: Jr st or one year calculus-based college physics or introduction to weather and climate; or cons inst
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
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. Enroll Info: Students should have completed at least one course in Botany, Agronomy, or Plant Sciences to feel comfortable with the course content.
Requisites: 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 2020
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. Enroll Info: Math 212, PHYSICS 202, or cons inst 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
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. Enroll Info: None
Requisites: MATH 234 and COMP SCI 200, 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 2017

## 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.
Enroll Info: ATM OCN 311 and 340 or graduate/professional standing
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: PHYSICS 208, MATH 234 cons inst
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 2020
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. Enroll Info: ATM OCN 610 or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. The course will be primarily in the laboratory -- focusing on hands-on experiences in the rotating tank lab and with real data. Enroll Info: ATM OCN 311 or ATM OCN 610
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: Spring 2016

## ATM OCN 630 - INTRODUCTION TO ATMOSPHERIC AND OCEANIC PHYSICS

3 credits.
Graduate level core course, covering 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. Enroll Info: PHYSICS 208, MATH 234 cons inst
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 2020

## 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. Enroll Info: ATM OCN 311 340, or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ATM OCN 638 - ATMOSPHERIC CHEMISTRY

3 credits.
Evolution of the atomsphere, chemical structure, instrumental analysis, trace gases, aerosol mechanics, chemical processes. Enroll Info: One year calculus-based college physics, chemistry, and calculus for science majors, or cons inst
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
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 creditsGraduate level core course in radiation. Introduction to basic laws, radiative transfer under clear sky conditions, scattering by individual particles, multiple scattering, radiative properties of clouds and aerosols, energy budget, miscellaneous applications. Enroll Info: PHYSICS 208, MATH 234 cons inst
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: Spring 2020

## 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. Enroll Info: ATM OCN 610630 cons inst, or Atm Ocn 650

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
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
Enroll Info: PHYSICS 208, MATH 234 cons inst
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: Spring 2020

ATM OCN 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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

## ATM OCN 682 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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 2020

## ATM OCN 691 - SENIOR THESIS

2-3 credits.

Enroll Info: A) atm ocn major; B) ATM OCN 311, 340 or con reg; C)
approval Assoc Chairman of Undergrad Affairs
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

Enroll Info: A) atm ocn major; B) ATM OCN 311, 340 or con reg: C) approval Assoc Chairman of Undergrad Affairs
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.
Offered on a $\mathrm{Cr} / \mathrm{N}$ grading basis. Does not count toward Grad residence credit. Enroll Info: Jr or Sr st; requires cons inst
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

ATM OCN 699 - DIRECTED STUDY
1-5 credits

Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020

## ATM OCN/CIV ENGR 701 - THE CHEMISTRY OF AIR POLLUTION

 2 credits.The course will cover 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. As part of the course, students will gain experience in presenting scientific research methods and results related to course materials. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: ATM OCN 610, 630 or equiv
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. Enroll Info: ATM OCN 610, 630 or equiv Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info:
ATM OCN 610, 630
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## ATM OCN 740 - ADVANCED ATMOSPHERIC RADIATION

3 credits.
The course deals with advanced topics in atmospheric radiative transfer. These include numerical methods to solve the radiative transfer equation, theory of scattering by spherical and non-spherical particles and advanced topics in gas absorption. Enroll Info: ATM OCN 640
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## ATM OCN/ENVIR ST 745 - METEOROLOGICAL SATELLITE

 APPLICATIONS2-3 credits.
Use of satellite imagery and measurements in meteorological research and operations; orbital characteristics; navigation; instrumentation. Enroll Info: ATM OCN 640 or 1 yr calc-based college physics MATH 234
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## ATM OCN/ENVIR ST/GEOSCI/ZOOLOGY 750 - PROBLEMS IN OCEANOGRAPHY <br> 3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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 oceanatmosphere coupling; interannual to interdecadal climate variability.
Enroll Info: ATM OCN 611 660, or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

## ATM OCN 761 - DYNAMICS OF OCEAN CIRCULATION

3-4 credits
Theories of general oceanic circulation: Sverdrup flow, western boundary layer; thermocline circulation, recirculation theory, ventilated thermocline theory; thermohaline circulation, abyssal flow, thermohaline instability and multiple equilibria. Enroll Info: ATM OCN 610, 660
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## ATM OCN 771 - NUMERICAL MODELING IN METEOROLOGY

3 credits.
Advanced techniques for development of meteorological numerical models. Survey of existing models for general circulation, operational weather prediction, mesoscale convection, and turbulence with emphasis on numerical methods and solution accuracy. Enroll Info: ATM OCN 610, 630 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## 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. Enroll Info: ATM OCN 311, 340; or 610, 630
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ATM OCN 801 - TOPICS IN THEORETICAL METEOROLOGY

2-3 credits
Advanced level subjects in dynamics, synoptics, climate-dynamics and atmospheric physics including recent advances. Enroll Info: Graduate level gen meteor consent of 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 2020

## ATM OCN 810 - PRACTICAL TRAINING IN ATMOSPHERIC AND OCEANIC SCIENCES I <br> 1 credit.

Practical training in atmospheric and oceanic sciences provides direct hands-on exposure to careers in the discipline. Placement into studentdesigned or an existing internship in atmospheric and oceanic science related companies, agencies, and organizations. The first of a two course sequence gets students set up in their internship and provides professional development. Enroll Info: None
Requisites: Declared in the Atmospheric and Oceanic Sciences M.S.
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. This second of a twocourse sequence continues the internship in atmospheric and oceanic science related companies, agencies, and organizations. Students will develop a portfolio of items necessary for the American Meteorological Society Certified Consulting Meteorology exam. Enroll Info: None Requisites: ATM OCN 810 and Declared in Atmospheric and Oceanic Sciences MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

ATM OCN 900 - SEMINAR-METEOROLOGY
1-2 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ATM OCN/BOTANY/CIV ENGR/ENVIR ST/GEOSCI/ZOOLOGY 911 LIMNOLOGY AND MARINE SCIENCE SEMINAR

1 credit.
Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst
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

ATM OCN 915 - SEMINAR-DYNAMICS
1-2 credits.
Enroll Info: None
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 2012

ATM OCN/ENVIR ST 925 - SEMINAR-CLIMATOLOGY
1-2 credits.
Historical climatology with emphasis on the last few centuries. Enroll Info: None
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 935 - SEMINAR-PHYSICAL METEOROLOGY
1-2 credits.
Topics in physical meteorology are explored at an advanced graduate level, including severe storms, cloud physics and atmospheric chemistry, depending on instructor. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012

## ATM OCN 945 - RADIATION AND REMOTE SENSING SEMINAR

1-2 credits.
Topics in radiation and remote sensing of the atmosphere and ocean.
Emphasis will be on current and classical problems in radiative transfer and remote sensing. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2013
ATM OCN/AGRONOMY/BOTANY/ENTOM/ENVIR ST/F\&W ECOL/GEOG/ ZOOLOGY 953 - INTRODUCTION TO ECOLOGY RESEARCH AT UWMADISON
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ATM OCN 965 - SEMINAR-OCEANOGRAPHY

1-2 credits.
Enroll Info: None
Requisites: 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
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. Enroll Info: None
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.
Enroll Info: None
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

## ATM OCN 999 - ADVANCED INDEPENDENT STUDY

1-6 credits.

## Enroll Info: None

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

## BIOCHEMISTRY (BIOCHEM)

BIOCHEM 100 - BIOCHEMISTRY FRESHMAN SEMINAR 1 credit.

The Freshman Biochemistry Seminar will introduce freshmen 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 undergraduate degree.. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## BIOCHEM 104 - MOLECULES TO LIFE AND THE NATURE OF SCIENCE

 3 credits.Students in this course will be introduced 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, we will 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. A major goal of this course is for students to appreciate the nature of science and to become better equipped to explore and evaluate scientific topics of interest to them. Enroll Info: None
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 2020

## BIOCHEM 289 - HONORS INDEPENDENT STUDY

1-2 credits.
Enroll Info: Enrolled in the CALS Honors Prgm So or Jr st. INTER-AG 288
Requisites: Consent of instructor
Course Designation: Level - Intermediate
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 2016

BIOCHEM 299 - INDEPENDENT STUDY
1-3 credits.
Enroll Info: Open to Fr, So or Jr st written cons inst
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

## 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. Designed for non-biochemistry majors who intend to take a single course in biochemistry for their major - not meant to fulfill the needs of pre-med and pre-vet students. Enroll Info: None
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 2020
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. Enroll Info: Requisites will vary depending on the particular topic covered.
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 2020

BIOCHEM 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION
1-8 credits.
Enroll Info: So, Jr or Sr st cons suprvsg inst, advisor, and intrshp prog coordinator
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. Enroll Info: Current enrollment in a UW-Madison 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. Enroll Info: None
Requisites: CHEM 341 or 343 or concurrent enrollment; or graduate student
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 2020
BIOCHEM 507 - GENERAL BIOCHEMISTRY I
3 credits.

Chemistry of biological materials, intermediary metabolism and protein structure. First semester of a year-long sequence in biochemistry; Biochemistry 508 is offered in the spring. This course is designed and recommended for undergraduate Biochemistry majors, but others are welcome. Enroll Info: None
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: Fall 2020
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. Enroll Info: A grade of BC or higher in BIOCHEM 507, or consent of instructor. Honors credits available with consent of instructor
Requisites: Must have completed 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 2020

## BIOCHEM/NUTR SCI 510 - NUTRITIONAL BIOCHEMISTRY AND METABOLISM <br> 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. Enroll Info: None
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: Fall 2020
BIOCHEM 550 - TOPICS IN MEDICAL BIOCHEMISTRY
2 credits.

Lectures. Biochemical and molecular analysis of selected human diseases. Topics will include lipid metabolism and atherosclerosis, cell cycle regulation and oncogene function in cancer, and human immunodeficiency virus (HIV) structure, life cycle, and mechanism of acquired immunodeficiency disease syndrome (AIDS). Enroll Info: None Requisites: Must have completed BIOCHEM 501 or BIOCHEM 507. 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 2020
BIOCHEM 551 - BIOCHEMICAL METHODS
4 credits.
Lab and student seminar. Introduction to modern biochemical laboratory techniques and current biochemical literature. Students will present a seminar based upon scientific literature that parallels experiments they will perform in lab. For advanced undergraduates and non-biochemistry graduate students. Enroll Info: None
Requisites: BIOCHEM 501 or BIOCHEM 507 or concurrent enrollment
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 2020

## 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. Enroll Info: None
Requisites: (MATH 217, 221, or 275) and BOTANY/BIOLOGY/
ZOOLOGY 151, ZOOLOGY 153, BIOCORE 381, or (ZOOLOGY/
BIOLOGY 101, 102 and BOTANY/BIOLOGY 130), 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 2020
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. Enroll Info: None
Requisites: (BIOCORE 381 and 382), 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 2020
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. Enroll Info: None
Requisites: CHEM 345 and (BIOCHEM 501 or 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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## BIOCHEM/B M I/BMOLCHEM/MATH 606 - MATHEMATICAL METHODS FOR STRUCTURAL BIOLOGY

3 credits.
A rigorous foundation for mathematical modeling of biological structures. Mathematical techniques include ordinary and partial differential equations, 3D Fourier analysis and optimization. Biological applications include protein folding, molecular dynamics, implicit solvent electrostatics, and molecular interactions. Enroll Info: None
Requisites: (MATH 234, 320, 340, or 375) and (COMP SCI 200, 300, 301, 302 , or 310 ) or graduate/professional standing or member of the PreMasters 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 2016

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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: No
Last Taught: Fall 2020

## BIOCHEM/NUTR SCI 619 - ADVANCED NUTRITION: INTERMEDIARY METABOLISM OF MACRONUTRIENTS <br> 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. Enroll Info: None
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 2019

## BIOCHEM/GENETICS/MD GENET 620 - EUKARYOTIC MOLECULAR BIOLOGY <br> 3 credits.

Focuses on the basic molecular mechanisms that regulate DNA, RNA, and protein metabolism in eukaryotic organisms. Enroll Info: None
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 2020

## BIOCHEM/BOTANY 621 - PLANT BIOCHEMISTRY

3 credits.
Biochemistry of photosynthesis, respiration, cell walls, and other metabolic and biosynthetic processes in plants. Enroll Info: Biochem BIOCHEM 501 or 507
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: No
Last Taught: Fall 2019

## BIOCHEM 624 - MECHANISMS OF ENZYME ACTION

2 credits.
Lecture. The relation of structure and kinetics to mechanisms of enzymatic catalysis; studies of specific enzymes and enzyme systems. Enroll Info: BIOCHEM 501, or 507508 , or 601; CHEM 561 or 565 ; or cons inst (not open to Fr)
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
Last Taught: Fall 2012

## 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. Enroll Info: None
Requisites: CHEM 345 and previous or concurrent enrollment in BIOCHEM 501 or 507; or graduate 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 2020
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. Enroll Info: None
Requisites: (BIOCHEM 501 or 507) and (BIOCORE 383, 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 2020

## BIOCHEM 636 - MACROMOLECULAR CRYSTALLOGRAPHY AND DYNAMICS <br> 2 credits.

Provide knowledge of techniques used to obtain detailed structural and dynamic information about biological macromolecules and survey results. Techniques include x-ray diffraction, electron microscopy and molecular dynamics simulations. Designed for advanced undergraduates and beginning graduate students in the biological sciences. Enroll Info: Concurrent or prior biochem; calc, freshman physics or equiv
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
Repeatable for Credit: No
Last Taught: Spring 2012

## BIOCHEM/NUTR SCI 645 - MOLECULAR CONTROL OF METABOLISM AND METABOLIC DISEASE <br> 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. Enroll Info: None
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 2020
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. For graduate students interested in the biological applications of physical chemistry. Enroll Info: Grad st or cons inst. Stdts must meet prereqs for CHEM 565 have some prev background in phys chem
Requisites: Graduate 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
BIOCHEM 681 - SENIOR HONORS THESIS
2-4 credits.
Enroll Info: Sr st cons inst (for hon Biochem majors only)
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 2020
BIOCHEM 682 - SENIOR HONORS THESIS
2-4 credits.
Continuation of 681. Enroll Info: Honors program candidacy BIOCHEM 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 2020

BIOCHEM 691 - SENIOR THESIS
2 credits.
Enroll Info: Sr st cons inst
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 2020
BIOCHEM 692 - SENIOR THESIS
2 credits.
Enroll Info: Sr st and cons inst
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

## 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.

## Enroll Info: None

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 2020
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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
BIOCHEM/GENETICS 703 - TOPICS IN EUKARYOTIC REGULATION
2 credits.
Design and interpretation of experiments addressing molecular
mechanisms of eukaryotic regulation. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: None
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 2020
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.
The goal is to help students transition from undergraduate consumers of knowledge to graduate students and future independent scientists who will discover and add new knowledge. Enroll Info: None
Requisites: Declared in Biochemistry PhD program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
BIOCHEM 721 - BIOCHEMICAL COMMUNICATION
2 credits.
Designed to introduce students 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. Also an introduction to the peer review process and revision of scientific writing. An intensive writing component requires students to produce multiple written and visual documents on the topic of their thesis research. Enroll Info: None
Requisites: Declared in Biochemistry PhD program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
BIOCHEM 729 - ADVANCED TOPICS
1-3 credits.
Specialized subjects of current interest. Enroll Info: None
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 799 - PRACTICUM IN BIOCHEMISTRY TEACHING 1-3 credits.

Enroll Info: None
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 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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.
Enroll Info: None
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/NUTR SCI 901 - SEMINAR-NUTRITION AND METABOLISM (ADVANCED) <br> 1 credit.

Presentation of original research results; discussion of recent articles in animal metabolism and nutrition. Enroll Info: None

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 906 - TOPICS IN MODELING FOR BIOCHEMICAL SYSTEMS 1 credit.

Participants discuss topics relevant to predictive modeling of bioenergy systems. Students present talks and lead brainstorming sessions intended to sharpen their skills at cross-disciplinary communication. Modeling microbes and plants at the genetic, molecular and systems level is emphasized. Enroll Info: None
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-ENZYMOLOGY (ADVANCED)
1 credit.
Research reports, special topics, and reports from recent literature in enzymology and enzyme mechanisms. Enroll Info: None
Requisites: 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. Enroll Info: None
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 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. Enroll Info: None
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. Enroll Info: None
Requisites: 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
BIOCHEM/BMOLCHEM/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. Enroll Info: None
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. Enroll Info: None
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

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. Enroll Info: None
Requisites: 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) <br> 1 credit.

Analysis of recent literature in topics related to prokaryotic and eukaryotic gene regulation, including regulation of transcription, translation, and genome organization. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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, patchclamping, cryo-electron microscopy, optical trapping, magnetic tweezers, and super resolution microscopy. Enroll Info: None
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 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. Enroll Info: None
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 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?" Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

## BIOCHEM/CBE 932 - BIOTECHNOLOGY TRAINING PROGRAM SEMINAR

 1 credit.Biotechnology Training Program trainees will present their research for critical review by audience. Enroll Info: Grad st. Required of Biotechnology Training Program trainees
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/CHEM 945 - SEMINAR-CHEMICAL BIOLOGY (ADVANCED) 1 credit.

Recent published research in chemical biology and related areas.
Intended for advanced graduate students, and required of all NIH
Chemistry-Biology Interface trainees. Enroll Info: None
Requisites: 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
BIOCHEM 990 - RESEARCH
1-12 credits.
Enroll Info: None
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 999 - SPECIAL PROBLEMS
1-3 credits.
Enroll Info: None
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 2005

## BIOLOGICAL SYSTEMS ENGINEERING (BSE)

BSE 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. Enroll Info: So st
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## BSE 170 - PRODUCT DESIGN PRACTICUM

2 credits.
Working in small groups, students design, fabricate and test a device that solves a real world problem. Lectures address information 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. Enroll Info: This course is intended for first year students (freshman or transfer) declared in Biological Systems Engineering or PreBiological Systems Engineering
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## BSE 201 - LAND SURVEYING FUNDAMENTALS

 1 credit.Basic surveying terminology, equipment, note keeping, computations and data presentation. Emphasis on differential leveling, radial topographic surveying and radial stakeout using a total station survey instrument. Enroll Info: So st, cons inst
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: MATH 112 or 114. Not recommended for stdts in engineering
Requisites: None
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. Enroll Info: MATH 221
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Fall 2020

## BSE 289 - HONORS INDEPENDENT STUDY

1-2 credits.
Enroll Info: Enrolled in the CALS Honors Prgm Jr or So st. INTER-AG 288
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.
Enroll Info: Freshmen, Sophomore or Junior standing written consent of instructor. Open to Freshmen
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

BSE 308 - CAREER MANAGEMENT FOR ENGINEERS 1 credit.

Information to aid engineers in career decision making including: personal time and fiscal management, job selection, career development, leadership, legal aspects of engineering, professional ethics. Enroll Info:

## None

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
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. Enroll Info: MATH 222, CHEM 104 or CHEM 109, introductory biology crse, 1 yr of high school physics, or cons inst
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 2020
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. Enroll Info: EMA 201
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## BSE/DS/LAND ARC 356 - SUSTAINABLE RESIDENTIAL CONSTRUCTION

 3 credits.Properties and use of building materials, framing systems, HVAC systems, code requirements, conservation of natural resources in building construction and operation. Enroll Info: None
Requisites: MATH 112, 114, or 171
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## BSE 364 - ENGINEERING PROPERTIES OF FOOD AND BIOLOGICAL MATERIALS <br> 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. Enroll Info: BSE 249 ME 361 or ChE 310, or cons inst
Requisites: None
Course Designation: Breadth - Physical Sci. Counts toward the Natural Sci req
Repeatable for Credit: No
Last Taught: Spring 2020

## BSE 365 - MEASUREMENTS AND INSTRUMENTATION FOR BIOLOGICAL SYSTEMS <br> 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).
Enroll Info: None
Requisites: Declared in Biological Systems Engineering program.
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## BSE/ENVIR ST 367 - RENEWABLE ENERGY SYSTEMS

3 credits.
Students will 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. Students will do 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. Enroll Info: None
Requisites: MATH 112 or 114 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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.

## Enroll Info: None

Requisites: CHEM 103, 109, or 115
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

BSE 375 - SPECIAL TOPICS
1-4 credits
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

BSE 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION 1-8 credits.

Enroll Info: So or Jr or Sr st cons suprvsg inst intrshp progm coordinator advisor
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: Summer 2020

## 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

BSE/FOOD SCI/M E 441 - RHEOLOGY OF FOODS AND BIOMATERIALS 3 credits.

Fundamentals of rheology and rheological evaluations of food and biomaterials; structure-function relationships. Enroll Info: None
Requisites: (PHYSICS 201, 207, 247 or E M A 201) and (B M E/CBE 320 or M E 363), or graduate/professional standing, or member of Engineering Guest Students

## Repeatable for Credit: No

Last Taught: Spring 2016
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. Enroll Info: CHEM 109 or equiv; organic chem or equiv Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None
Requisites: (BSE 249 or CBE 250) and (CIV ENGR 310 or CBE/B M E 320 or ME 363) and declared in Bio Systems, Biomedical, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical, Nuclear, Engineering Physics, Engineering Mechanics, MSE, or grad standing Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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). Enroll Info: M E 361, CBE 310 or an equivalent Thermodynamics course; M E 363, CBE/B M E 320, CEE 310 or an equivalent Fluid Mechanics course
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Jr st in Engr or cons inst
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## BSE 473 - IRRIGATION AND DRAINAGE SYSTEMS DESIGN

2 credits.

Engineering and management applications of soil-plant-water relationships applied to drainage and irrigation design. Enroll Info: Jr st in Engr or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## BSE/M E 475 - ENGINEERING PRINCIPLES OF AGRICULTURAL MACHINERY <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## BSE/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. Enroll Info: Sr st or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Students develop design project proposals for real-world design problems. Enroll Info: Junior standing
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Declared in Biological Systems Engineering program with Senior standing and BSE 508
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## BSE/B M E/CBE 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. Enroll Info: None
Requisites: Junior standing and (ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: Sr in Engr or Grad st or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## BSE/FOOD SCI 642 - FOOD AND PHARMACEUTICAL SEPARATIONS

 2-3 credits.Basic principles of production-scale separation processes in the food and pharmaceutical industries including gravity sedimentation and centrifugation, extraction, adsorption, chromatography, precipitation, conventional and membrane filtration, crystallization, and drying. Third credit adds group term project, integrating principles with experiments, defined by students' interests. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## BSE 671 - TOPICS IN NATURAL RESOURCES ENGINEERING

## 1-3 credits.

Advanced topics in natural resource engineering. Enroll Info: St or Grad st Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2013

BSE 681 - SENIOR HONORS THESIS
2-4 credits.
Enroll Info: Hon candidacy
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.
Continuation of 681. Enroll Info: Honors program candidacy BSE 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
BSE 691 - SENIOR THESIS
2 credits.
Enroll Info: Sr st cons inst
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017
BSE 692 - SENIOR THESIS
2 credits.
Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2018
BSE 699 - SPECIAL PROBLEMS
1-4 credits.
Enroll Info: Sr st cons inst
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
BSE 799 - PRACTICUM IN AGRICULTURAL ENGINEERING TEACHING 1-3 credits.

Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
BSE 875 - SPECIAL TOPICS
1-4 credits.
Enroll Info: None
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

BSE 900 - SEMINAR
1 credit.
Enroll Info: None
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
BSE 901 - GRADUATE RESEARCH SEMINAR
1 credit.
Presentation and evaluation of graduate student thesis and non-thesis research. Enroll Info: BSE 900
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
BSE 990 - RESEARCH
1-12 credits.
Enroll Info: None
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
BSE 999 - SPECIAL PROBLEMS
1-3 credits.
Enroll Info: None
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

## 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. Enroll Info: Not recommended for students with credit already in Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151 or 152
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 2020

BIOLOGY/ZOOLOGY 102 - ANIMAL BIOLOGY LABORATORY 2 credits.

General concepts of animal biology at an introductory level. The general body plans and strategies used to accomplish the basic tasks of staying alive of 9 major animal groups are studied using preserved and live animals. The diversity within each group of animals is studied by integrating the body plans with the lifestyle and ecology of the animals. The evolutionary relationships between the animals is a major part of the course. Dissections of earthworm, freshwater mussel,squid, sea star, and rat also aid the study of these general principles. Enroll Info: Not recommended for students with credit already in Zoology/Biology/ BOTANY/BIOLOGY/ZOOLOGY 151/152
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 2020
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. Enroll Info: Open to Fr; not open to stdts who have taken BOTANY 100 or Botany/ZOOLOGY/BIOLOGY/ BOTANY 151-152. HS or coll chem crse recommended
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 2020

## BIOLOGY/BOTANY/ZOOLOGY 151 - INTRODUCTORY BIOLOGY 5 credits.

First semester of a two semester course designed for majors in biological sciences. 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. HS chem or concurrent registration in college chemistry strongly advised. Enroll Info: Not recommended for students with credit already in Zoo/Bio 101, 102 or Botany/Bio 130
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 2020

BIOLOGY/BOTANY/ZOOLOGY 152 - INTRODUCTORY BIOLOGY 5 credits.

Second semester of a two semester course designed for majors in biological sciences. Continuation of 151. 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. Enroll Info: Biology/Botany/ZOOLOGY/BIOLOGY/ BOTANY 151. Not recommended for students with credit already in Zoology/BIOLOGY/ZOOLOGY 101,102 or Botany/BIOLOGY/BOTANY 130 Requisites: 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: Fall 2020
BIOLOGY 299 - DIRECTED STUDIES
1-4 credits.
Graded on a letter basis. Enroll Info: None
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 2015
BIOLOGY 375 - SPECIAL TOPICS
1-5 credits.
Enroll Info: Requisite varies by topic
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 2017

BIOLOGY 399 - INTERNSHIP/FIELD EXPERIENCE
1-8 credits.
Graded on a letter basis. Enroll Info: So st cons of supervising inst, advisor internship progm coordinator
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

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, $\mathrm{K}-12$ students, and the general public. Enroll Info: None Requisites: GENETICS 466, 468, 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: Fall 2020
BIOLOGY 675 - SPECIAL TOPICS
1-5 credits.
Enroll Info: Requisite varies by topic
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 2015
BIOLOGY 681 - SENIOR HONORS THESIS
2-3 credits.
Graded on a letter basis. Enroll Info: 2 sem of coll biol cons inst
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
BIOLOGY 682 - SENIOR HONORS THESIS
2-3 credits.
Graded on a letter basis. Enroll Info: 2 sem of coll biol cons inst
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 2020

BIOLOGY 691 - SENIOR THESIS
2-3 credits.
Graded on a letter basis. Enroll Info: 2 sem of coll biol cons inst
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
BIOLOGY 692 - SENIOR THESIS
2-3 credits.
Graded on a letter basis. Enroll Info: 2 sem of coll biol cons inst 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

## BIOLOGY 699 - DIRECTED STUDIES

1-4 credits.
Graded on a letter basis. Enroll Info: 2 sem of coll biol cons inst
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

## BIOLOGY CORE CURRICULUM <br> (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. Enroll Info: None

## 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: Fall 2020

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. Enroll Info: None
Requisites: Declared in Biology Core Curriculum program
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 2020
BIOCORE 382 - EVOLUTION, ECOLOGY, AND GENETICS LABORATORY 2 credits.

Writing-intensive course with opportunities for students to make observations and generate and test their own questions. Includes field trips to the Biocore Prairie and local stream, and research projects that focus on genetics and evolution. Enroll Info: Completion of or concurrent registration in BIOCORE 381 (or Biocore 301 previous to Fall 2014)
Requisites: Declared in Biology Core Curriculum program
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 2020
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. Enroll Info: BIOCORE 381 (or Biocore 301 previous to Fall 2014), CHEM 341 or 343; or consent of instructor
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 2020

## BIOCORE 384 - CELLULAR BIOLOGY LABORATORY

2 credits.
Writing-intensive course with opportunities for students to generate and test their own 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. Enroll Info: Completion of or concurrent registration in BIOCORE 383 (or Biocore 303 previous to Spring 2014) or BIOCHEM 501 GENETICS 466. Sophomore or Junior status or consent of instructor
Requisites: BIOCORE 381
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 2020

## BIOCORE 401 - PEER MENTORING

1 credit.
Weekly seminar for development of mentoring, group facilitation, leadership, and interpersonal skills used in peer learning and leading mentored study groups. This course focuses on the pedagogy, skills, and effective techniques used to facilitate learning in small groups. Activities and assignments include discussion of readings, leading practice facilitation/ problem solving sessions and receiving feedback, development of practice problems and questions from lower order to higher order cognitive levels using Blooms Taxonomy, doing reciprocal mentor observations, and reflective journal assignments. Enroll Info:

## None

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 2020

## BIOCORE 485 - PRINCIPLES OF PHYSIOLOGY

3 credits.
Physiology course that considers 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. Enroll Info: None
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 2020

## BIOCORE 486 - PRINCIPLES OF PHYSIOLOGY LABORATORY

 2 credits.Students experience the process of science by collaborating on two multi-week independent experiments to investigate their own 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. Enroll Info: None
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 2020

## BIOCORE 587 - BIOLOGICAL INTERACTIONS

3 credits

This capstone course helps students build on and integrate the knowledge and skills they have gained in the previous three semesters of Biocore lab and lecture coursework through readings and analysis of primary scientific literature. The course is organized such that students 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. Enroll Info: BIOCORE 381, 383, and 485 (or Biocore 301, 303, and 323 previous to Spring 2014); or consent of instructor
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 2020
BIOCORE 699 - DIRECTED STUDY
1-3 credits.

Enroll Info: Biocore 301 consent of 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 2020

## 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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## В M E 200 - BIOMEDICAL ENGINEERING DESIGN

1 credit.
Sophomores will work in a team with juniors on a client-centered biomedical engineering design project to learn concept generation, product analysis, specifications, evaluation, clinical trials, regulation, liability, and ethics. Enroll Info: None
Requisites: Sophomore standing and declared in Biomedical Engineering
Repeatable for Credit: No
Last Taught: Fall 2020

## B M E 201 - BIOMEDICAL ENGINEERING FUNDAMENTALS AND DESIGN

2 credits.

Fundamentals of biomedical engineering and principles of design. Handson skills including computer-aided design, machining, and fabrication of a physical medical device prototype. Enroll Info: None
Requisites: B M E 200
Repeatable for Credit: No
Last Taught: Spring 2020

B M E 300 - BIOMEDICAL ENGINEERING DESIGN
1 credit.
Juniors will work in a team with and provide mentorship to sophomores on a client-centered biomedical engineering design project to learn concept generation, product analysis, specifications, evaluation, clinical trials, regulation, liability, and ethics. Enroll Info: None
Requisites: B M E 201
Repeatable for Credit: No
Last Taught: Fall 2020
B M E 301 - BIOMEDICAL ENGINEERING DESIGN
1 credit.

Juniors will work in a team composed of all juniors on a client-centered biomedical engineering design project to learn concept generation, product analysis, specifications, evaluation, intellectual property, clinical trials, regulation, liability, and ethics. Enroll Info: None
Requisites: B M E 201
Repeatable for Credit: No
Last Taught: Spring 2020
B M E 310 - BIOINSTRUMENTATION
3 credits.
Bioinstrumentation covering clinical and research measurements. Laboratory experiments complement the lectures. Enroll Info: None
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: Fall 2020

## 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). Enroll Info: None
Requisites: (E M A 303 or M E 306), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## B M E/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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Biomedical Engineering and (MATH 222 or 276)
Repeatable for Credit: No
Last Taught: Fall 2020

## B M E/CBE 330 - ENGINEERING PRINCIPLES OF MOLECULES, CELLS, AND TISSUES <br> 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. Enroll Info: None
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 2020

## B M E 389 - HONORS IN RESEARCH

1-3 credits.
Undergraduate honors research projects supervised by faculty members. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## B M E 399 - INDEPENDENT STUDY

1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: (B M E 300 or B M E 301) and (B M E 310, 315, or PHM SCI/
BME 430)
Repeatable for Credit: No
Last Taught: Fall 2020

## B M E 402 - BIOMEDICAL ENGINEERING DESIGN

1 credit.
Final semester seniors will work in a team to evaluate, refine, document and orally present the client-centered biomedical engineering design completed in their prior capstone design course. Enroll Info: None
Requisites: B M E 400
Repeatable for Credit: No
Last Taught: Spring 2020

## B M E/M E 414 - ORTHOPAEDIC BIOMECHANICS - DESIGN OF ORTHOPAEDIC IMPLANTS <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 <br> Last Taught: Fall 2017

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/ BOTANY 151, ZOOLOGY 153, or BIOCORE 383) and (CHEM 341 or 343)

## Repeatable for Credit: No

Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: E C E 330 and (COMP SCI 200, 220, 300, or 301), 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

## B M E 489 - HONORS IN RESEARCH

1-3 credits.
Biomedical engineering undergraduate honors research projects supervised by faculty members. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## B M E/H ONCOL/MED PHYS/PHYSICS 501 - RADIATION PHYSICS AND DOSIMETRY <br> 3 credits.

Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry. Enroll Info: None
Requisites: MATH 234 and (PHYSICS 241 or 249) 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
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. Enroll Info: None
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 2020

## B M E/CBE 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: B M E/CBE 510 or concurrent enrollment, or graduate/ professional standing
Repeatable for Credit: No
Last Taught: Fall 2019

## B M E 515 - THERAPEUTIC MEDICAL DEVICES

1 credit.
Design of medical devices to treat pathology. Enroll Info: None Requisites: Junior standing and (ZOOLOGY/BIOLOGY 101 and 102, 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/BSE/CBE 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. Enroll Info: None
Requisites: Junior standing and (ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## B M E/CBE 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or (E C E 330 or MED PHYS/ B M E 573)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## B M E/MED PHYS 535 - INTRODUCTION TO ENERGY-TISSUE INTERACTIONS <br> 3 credits.

Explore physical interactions between thermal, electromagnetic and acoustic energies and biological tissues with emphasis on therapeutic medical applications. Enroll Info: None
Requisites: PHYSICS 202, 208, 248, or 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 2017
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. Enroll Info: None
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 2020

## B M E 550 - INTRODUCTION TO BIOLOGICAL AND MEDICAL MICROSYSTEMS <br> 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. Enroll

## Info: None

Requisites: B M E 310 and (ZOOLOGY/BIOLOGY 101 and 102, 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 2020

## 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. Enroll Info: None
Requisites: (MATH 319, 320, or 375), (B M E/CBE 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 2020

## 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. Enroll Info: None
Requisites: (CBE 310 and B M E/CBE 320, or B M E/CBE 330) and (ZOOLOGY/BIOLOGY 101 and 102, 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: 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 2020

## 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. Enroll Info: None
Requisites: 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 2020

## B M E/MED PHYS 567 - THE PHYSICS OF DIAGNOSTIC RADIOLOGY

 4 creditsPhysics of x-ray diagnostic procedures and equipment, radiation safety, general imaging considerations; lecture and lab. Enroll Info: None
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. Enroll Info: None

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 2020

## B M E/MED PHYS 573 - MEDICAL IMAGE SCIENCE: MATHEMATICAL AND CONCEPTUAL FOUNDATIONS

3 credits.
The conceptual and mathematical foundations of medical imaging, including both deterministic and stochastic aspects. Enroll Info: None
Requisites: MATH 234, 319 and (PHYSICS 202 or 208) or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## B M E/MED PHYS 574 - IMAGING IN MEDICINE: APPLICATIONS

 3 credits.Builds on the fundamental conceptual and mathematical foundations addressed in MED PHYS/B M E 573, with application of concepts to practical medical imaging problems and emerging quantitative imaging techniques. Enroll Info: None
Requisites: MED PHYS/B M E 573
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None 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. Enroll Info: None
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 2017

## B M E/MED PHYS 580 - THE PHYSICS OF MEDICAL IMAGING WITH IONIZING RADIATION <br> 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. Enroll Info: None
Requisites: PHYSICS/B M E/H ONCOL/MED PHYS 501 and MED PHYS/ B M E 573
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## B M E 601 - SPECIAL TOPICS IN BIOMEDICAL ENGINEERING

 1-3 credits.Directed study projects as arranged with instructor. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019
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. Enroll Info: None
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 2020

## B M E/MED PHYS/PHMCOL-M/PHYSICS/RADIOL 619 - MICROSCOPY

 OF LIFE3 credits.
Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging. Enroll Info: None
Requisites: PHYSICS 104, 202, 208, or 248 or 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 2020

## 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. Enroll Info: None
Requisites: CBE/B M E 510 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. Enroll Info: None
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 2020
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. Enroll Info: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## B M E 701 - SEMINAR IN BIOMEDICAL ENGINEERING 0 credits.

Speakers present current research, reviews of previous research, or topics of interest to biomedical engineering graduate students and faculty. Enroll Info: None
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

## B M E 702 - GRADUATE COOPERATIVE EDUCATION PROGRAM <br> 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. Enroll Info: None
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

## 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). Enroll Info: None
Requisites: MED PHYS/B M E 568
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: 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: Spring 2020

## 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. Enroll Info: None
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/MED PHYS/PHYSICS 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2013

## B M E/E C E/MED PHYS 778 - MACHINE LEARNING IN ULTRASOUND IMAGING <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: 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. Enroll Info: None
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

## B M E 799 - ADVANCED INDEPENDENT STUDY

 1-5 credits.Under faculty supervision. Enroll Info: None
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
B M E/PHM SCI 801 - SEMINAR ON DEVELOPMENT OF MEDICAL DEVICES AND DRUGS
1 credit.
An overview of three major sectors of medical product and technology development including pharmaceuticals, medical devices and combination products. Regulatory framework, disclosure and patenting, technical design and development strategy, academia-specific development challenges will be among the major lecture topics. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
B M E 890 - PRE-DISSERTATION RESEARCH
1-9 credits.
Under faculty supervision. Enroll Info: None
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

## 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. Enroll Info: None
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
B M E 990 - RESEARCH AND THESIS
1-9 credits.
Under faculty supervision. Enroll Info: None
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

## B M E 999 - ADVANCED INDEPENDENT STUDY

1-9 credits.
Under faculty supervision. Enroll Info: None
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 314 - INTRODUCTION TO HUMAN BIOCHEMISTRY

3 credits.

Introductory aspects of biological chemistry with an emphasis on providing a broad overview of both basic and clinical aspects of human biochemistry for health professionals. Enroll Info: None
Requisites: CHEM 104 or 108
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: Summer 2018
BMOLCHEM 503 - HUMAN BIOCHEMISTRY
3 credits.
Basic principles of biological chemistry with emphasis on its application to the medical sciences. Enroll Info: None
Requisites: CHEM 341 or 343
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 2014
BMOLCHEM 504 - HUMAN BIOCHEMISTRY LABORATORY
3 credits.
Introduction to basic biochemistry and molecular biology lab techniques
through investigation of an enzyme involved in human metabolism. Enroll Info: None
Requisites: BIOCHEM 501, 507, 508, BMOLCHEM 503, 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## BMOLCHEM/B M I/BIOCHEM/MATH 606 - MATHEMATICAL METHODS FOR STRUCTURAL BIOLOGY

3 credits.
A rigorous foundation for mathematical modeling of biological structures. Mathematical techniques include ordinary and partial differential equations, 3D Fourier analysis and optimization. Biological applications include protein folding, molecular dynamics, implicit solvent electrostatics, and molecular interactions. Enroll Info: None
Requisites: (MATH 234, 320, 340, or 375) and (COMP SCI 200, 300, 301, 302, or 310) or graduate/professional standing or member of the PreMasters 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 2016

## 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. Enroll Info: None
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 2020

## BMOLCHEM/CHEM 627 - METHODS AND TECHNOLOGIES FOR

 PROTEIN CHARACTERIZATION2-3 credits.
Seeks to engage students interested in chemical instrumentation and those who desire to apply proteomic technologies to current biological problems. Understanding the current proteomics landscape, the limitations of these technologies, and their practical applications are among the course learning objectives. Enroll Info: None
Requisites: 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

## BMOLCHEM/MICROBIO 668 - MICROBIOLOGY AT ATOMIC RESOLUTION <br> 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. Enroll Info: None
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 2019

## BMOLCHEM 675 - ADVANCED OR SPECIAL TOPICS IN BIOMOLECULAR CHEMISTRY <br> 1-3 credits.

Examines special topics in biomolecular chemistry. Topics and content will vary each semester and by section of the course. Enroll Info: None 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 2020

## 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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## BMOLCHEM 720 - EXPERIMENTAL DESIGN AND PARADIGMS IN CELLULAR BIOCHEMISTRY AND MOLECULAR BIOLOGY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
BMOLCHEM 901 - BIOMOLECULAR CHEMISTRY SEMINAR
1 credit.
Critical review of selected topics in biomolecular chemistry. Enroll Info: None
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/BIOCHEM 913 - SEMINAR-RIBOGROUP (ADVANCED) 1 credit.

Student-led discussions of RNA-related problems. Enroll Info: None Requisites: 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

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. Enroll Info: None
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. Enroll Info: None
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

## BIOSTATISTICS AND MEDICAL INFORMATICS (B M I)

## B M I/POP HLTH 451 - INTRODUCTION TO SAS PROGRAMMING FOR POPULATION HEALTH <br> 2 credits.

Use of the SAS programming language for the management and analysis of biomedical data. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing. Not open to students with credit for STAT 511 or 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 2020

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. Enroll Info: None
Requisites: 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 2020
B M I 544 - INTRODUCTION TO CLINICAL TRIALS II
3 credits.
Intended for biomedical researchers, focuses on design, implementation, and conduct of clinical trials. Topics include: regulatory requirements; data collection; data quality and management; budgets; federal, institutional, and sponsor-defined requirements; establishment of research infrastructures; preparation of investigator-INDs; investigator responsibilities. Enroll Info: BMI 541 or equiv BMI 542 cons inst Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## B M I/STAT 546 - PRACTICUM IN CLINICAL TRIAL DATA ANALYSIS AND INTERPRETATION <br> 3 credits.

Provides practice in analysis and interpretation of existing datasets from national and international clinical trials in a variety of diseases. Students will develop a research question, review clinical protocols, and analyze available data to prepare a report. Enroll Info: None
Requisites: (B M I/STAT 541 or HORT/F\&W ECOL/STAT 572) and (B M I/ STAT 542 or B M I/STAT 641)
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 2015

## B M I/POP HLTH 551 - INTRODUCTION TO BIOSTATISTICS FOR

 POPULATION HEALTH3 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 twosample binomial inference, underlying assumptions and diagnostic work. Enroll Info: None
Requisites: Declared in the Population Health, Epidemiology or Clinical Investigation graduate program. Not open to students with credit for STAT/B M I 541
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020

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B M I/POP HLTH 552 - REGRESSION METHODS FOR POPULATION HEALTH
3 credits.
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Introduction to the primary statistical tools used in epidemiology and health services research; multiple linear regression, logistic regression and survival analysis. Enroll Info: None
Requisites: STAT/B M I 541 or POP HLTH/B M I 551
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 $368-M a t l a b$. Enroll Info: None
Requisites: (MATH 320 or 340 ) and (STAT 511, 541, POP HLTH/B M I 551, STAT 324, 371, or 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: Spring 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## B M I/COMP SCI 576 - INTRODUCTION TO BIOINFORMATICS 3 credits.

Algorithms for computational problems in molecular biology. The course will study algorithms for problems such as: genome sequencing and mapping, pairwise and multiple sequence alignment, modeling sequence classes and features, phylogenetic tree construction, and geneexpression data analysis. Enroll Info: None
Requisites: (COMP SCI 300 or 367) and MATH 222 or graduate/ professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals
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 2020

## B M I/BIOCHEM/BMOLCHEM/MATH 606 - MATHEMATICAL METHODS FOR STRUCTURAL BIOLOGY

3 credits.
A rigorous foundation for mathematical modeling of biological structures. Mathematical techniques include ordinary and partial differential equations, 3D Fourier analysis and optimization. Biological applications include protein folding, molecular dynamics, implicit solvent electrostatics, and molecular interactions. Enroll Info: None
Requisites: (MATH 234, 320,340, or 375) and (COMP SCI 200, 300, 301, 302, or 310) or graduate/professional standing or member of the PreMasters 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 2016

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: 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: Spring 2020
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. Enroll Info: None
Requisites: 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: Fall 2020

## B M I/POP HLTH 651 - ADVANCED REGRESSION METHODS FOR POPULATION HEALTH <br> 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. Enroll Info: None
Requisites: POP HLTH/B M I 552
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: 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. Enroll Info: Jr st or cons inst
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## B M I 750 - CUMULATIVE CAPSTONE IN CLINICAL AND HEALTH INFORMATICS <br> 3 credits.

Application of core coursework to a real world project where students assess all 10 American Medical Association informatics (AMIA) competencies for healthcare informatics. These competencies are integrated into a large cumulative project to ascertain the knowledge, skills and attributes to successfully work in an informatics field. Enroll Info: None
Requisites: Declared in Clinical and Health Informatics MS program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## B M I/COMP SCI 767 - COMPUTATIONAL METHODS FOR MEDICAL IMAGE ANALYSIS <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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, geneexpression data analysis, protein and RNA structure prediction, and whole-genome analysis and comparisons. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## B M I 826 - SPECIAL TOPICS IN BIOSTATISTICS AND BIOMEDICAL INFOMATICS <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## B M I/STAT 877 - STATISTICAL METHODS FOR MOLECULAR BIOLOGY

 3 credits.Develop statistical problems in gene mapping, high throughputomic 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. Enroll Info: None
Requisites: STAT 610 or MATH/STAT 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## B M 1881 - 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: B M I 881
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: B M I 883
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## B M I 899 - PRE-DISSERTATOR RESEARCH

1-12 credits.
Pre-dissertator Research. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
Requisites: MED SCI-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 MEDICINE1 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. Enroll Info: None
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

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. Enroll Info: None
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

## B M I 990 - DISSERTATOR RESEARCH

1-3 credits.
Dissertator Research. Course is open to dissertators only. Enroll Info: None
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

## 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 presnet uses of plants and microbes by humans, including emerging applications of biotechnology. Lectures and short lab/discussions. Enroll Info: None

## 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 2020
BOTANY/PL PATH 123 - PLANTS, PARASITES, AND PEOPLE 3 credits.

The course will explore the interaction between society and plantassociated 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Open to Fr; not open to stdts who have taken BOTANY 100 or Botany/ZOOLOGY/BIOLOGY/
BOTANY 151-152. HS or coll chem crse recommended

## 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 2020

## BOTANY/BIOLOGY/ZOOLOGY 151 - INTRODUCTORY BIOLOGY

5 credits.
First semester of a two semester course designed for majors in biological sciences. 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. HS chem or concurrent registration in college chemistry strongly advised.
Enroll Info: Not recommended for students with credit already in Zoo/Bio
101, 102 or Botany/Bio 130
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 2020
BOTANY/BIOLOGY/ZOOLOGY 152 - INTRODUCTORY BIOLOGY 5 credits.

Second semester of a two semester course designed for majors in biological sciences. Continuation of 151. 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. Enroll Info: Biology/Botany/ZOOLOGY/BIOLOGY/
BOTANY 151. Not recommended for students with credit already in Zoology/BIOLOGY/ZOOLOGY 101,102 or Botany/BIOLOGY/BOTANY 130
Requisites: 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: Fall 2020

BOTANY 211 - UNDERSTANDING CHANGED LANDSCAPES: WISCONSIN 3 credits.

Aims to expose you 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. We will ask: what roles did science play in shaping the landscape? What roles should it have played? What roles does science play in current land use? We will not be afraid to tackle controversy (genetically modified crops, the endangered species act, water use, global change), but we will remain committed to listening to, absorbing and respecting the diversity of experiences we may bring to the classroom. Enroll Info: None
Requisites: Sophomore standing and declared in 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 2020

## 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. Enroll Info: None
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 2020

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 tradeoffs and conflicts. Look at the many real-world programs in place at the global, national, and local level to sustainably manage forests. Enroll Info: None
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 2020
BOTANY/ENVIR ST/ZOOLOGY 260 - INTRODUCTORY ECOLOGY
3 credits.
For nonbiology students: the relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs. Enroll Info: Open to Freshmen. Does not count toward Botany or Zoology major
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## BOTANY 265 - RAINFORESTS AND CORAL REEFS

3 credits.
Are you awed by the amazing biodiversity found in rainforests and coral reefs? Want an opportunity to see these ecosystems first hand and decide if a career in tropical biology or international conservation is for you? This course focuses on the ecology of the world's most biodiverse ecosystems, and their global importance. Combining lecture with online discussions and case studies, you'll learn the physical, chemical, and biological processes that make rainforests and coral reefs function, and the history of human dependence upon these ecosystems. This course will help you understand why both of these ecosystems currently are threatened and what actions can and must be taken to protect them. An optional 10-day, 2 credit field expedition to a rainforest and/or coral reef site in Central or South America will be offered over winter break (BIOLOGY 399). Enroll Info: None
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 2020

## BOTANY 299 - DIRECTED STUDY IN BOTANY

1-3 credits.
Elementary level directed study/independent research. The purpose of this course to introduce undergraduate students to research questions and, facilitate their learning in the field of botany by providing them with guidance and mentorship in a research environment. Enroll Info: None

## 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 2020

## 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; lecture and lab. Enroll Info: A 5 cr intro crse in botany
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 2020

## 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. Enroll Info: Introductory course in botany
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
BOTANY 330 - ALGAE
3 credits.
Introduction to ecology, evolution, systematics, taxonomy, physiology, biochemistry, cell biology, and molecular biology of freshwater, terrestrial and marine algae. Lecture and lab. Lab emphasis on techniques for identification, culture, analysis of growth and reproduction, and community composition assessment. Enroll Info: 5-cr intro botany crse or cons inst
Requisites: Sophomore standing; not open to special students
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: A 5 cr intro crse in botany
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: Spring 2020

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 biological, ecological and economic significance. Enroll Info: None
Requisites: BOTANY/BIOLOGY 130,ZOOLOGY/BIOLOGY/BOTANY 151 and ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 381 AND 382 or graduate/professional standing. Not open to students with credit for BOTANY/PL PATH 332
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 2020
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. Enroll Info: None
Requisites: MICROBIO 303
Repeatable for Credit: No
Last Taught: Spring 2020
BOTANY/GEOG 338 - ENVIRONMENTAL BIOGEOGRAPHY
3 credits.
This course will explore 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. Enroll Info: GEOG/ENVIR ST 120, 127 or consent of instructor
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or 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

4 credits.
Theoretical and practical training in plant cell and tissue culture, and plant genetic engineering. Includes overview of current techniques, biosafety and regulatory requirements, and experimental design and analysis used in fundamental and applied research on plants. Valuable hands-on training to those interested in careers in biotechnology. Enroll Info: None
Requisites: (BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY/BOTANY 152, or 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: Spring 2019

## 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. Enroll Info: None
Requisites: PL PATH/BOTANY 123, BOTANY/BIOLOGY 130, SOIL SCI/ ENVIR ST 101, SOILSCI 132, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, BOTANY 100, or AGRONONY 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 (phenetics, cladistics, morphology and molecules). Lab emphasis on representative families and genera of
flowering plants in Wisconsin, use of keys and manuals, plant collection. Recommended for botany majors; lecture and lab. Enroll Info: A 5 cr intro crse in botany
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## BOTANY 401 - VASCULAR FLORA OF WISCONSIN

4 credits.
Taxonomic survey of the vascular plants of Wisconsin, with emphasis on the angio-sperms. Lecture, lab and field work. Enroll Info: A 5 cr intro col crse in bot or equiv
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: A 5 cr intro college crse in bot or equiv
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 2020

## BOTANY 403 - FIELD COLLECTIONS AND IDENTIFICATION

1-4 credits.
Students consult the instructor in the spring or summer for equipment and directions for making a plant collection in summer or fall. Enroll Info: Bot 400 or 401 . Open only to students who have made collections during the summer or will be making collections in early fall
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 2016
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. Enroll Info: An elem course in zool or botany So st; Genetics/Botany/Zool 160 or 466 recommended
Requisites: Sophomore standing and ZOOLOGY/BIOLOGY/BOTANY 151, BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY 101, BIOCORE 301, 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## BOTANY 422 - PLANT GEOGRAPHY

3 credits.
Biogeography of plants. Relationship to climate and geology; paleobiogeography, vicariance and island biogeography; history and distribution of floras of North America and Wisconsin; lecture and demo lab; open to advanced students in the natural sciences. Enroll Info: A crse in plant taxonomy is highly recommended
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## BOTANY/ZOOLOGY 450 - MIDWESTERN ECOLOGICAL ISSUES: A CASE STUDY APPROACH

2 credits.
This web course explores 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. Enroll Info: Intro biology crse, interest in solving problems
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: Summer 2020
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. Lecture and lab. Enroll Info: BOTANY 100, or BOTANY/BIOLOGY 130, or Botany/ZOOLOGY/BIOLOGY/ BOTANY 151-152, or Biocore 313
Requisites: Sophomore standing or special student classification 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 2020

## 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; lecture and lab. Enroll Info: Intro course in botany zoology, or Bot/Zoo 151-152, or Biocore 301 or 333 ; for biol sci majors only
Requisites: None
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: Fall 2020

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. Enroll Info: One of the following: Bot/For/ Zoo 460, Ent/PI Path/For 500, PI Path/Bot 505, Forestry 550, or Entom 342
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: A five credit course in botany or biology (e.g., BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY 151) or cons inst Requisites: None
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: Fall 2020
BOTANY 499 - INTERMEDIATE DIRECTED RESEARCH
1-3 credits.
Undergraduate students may research questions and facilitate their learning in the field of botany by providing them with guidance and mentorship in a research environment. Enroll Info: None
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

## BOTANY 500 - PLANT PHYSIOLOGY

3-4 credits.
An in-depth look at plant growth, development, respiration, photosynthesis, mineral nutrition, and water relations. For junior, senior and graduate students; not for those who have taken Biocore. In the laboratory, experimental approaches will be used to demonstrate principles described in lecture. 3-credit option (lecture only) available with consent of instructor. Enroll Info: Intro botany or biology sequence required; organic chem recomm. Undergrads must enroll for 4 cr (lec lab); Grads may enroll for 3 cr (lec only) or 4 cr
Requisites: None
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 2020

## 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. This course 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. Enroll Info: An upper level crse in microbiol (e.g. Bact 303); biochem (e.g. BIOCHEM 501); genetics (e.g. GENETICS 466) or cons inst 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: No
Last Taught: Spring 2020
BOTANY 563 - PHYLOGENETIC ANALYSIS OF MOLECULAR DATA
3 credits.
A course in the theory and practice of phylogenetic inference from DNA sequence data. Enroll Info: A crse in genetics/evolution/systematics a crse in stats/probability, or cons inst
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: No
Last Taught: Spring 2018

## BOTANY 575 - SPECIAL TOPICS

1-3 credits.
Topics of interest to undergraduates, taught as the need arises. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

## BOTANY/BIOCHEM 621 - PLANT BIOCHEMISTRY

3 credits.
Biochemistry of photosynthesis, respiration, cell walls, and other metabolic and biosynthetic processes in plants. Enroll Info: Biochem BIOCHEM 501 or 507
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: No
Last Taught: Fall 2019

## 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. Enroll Info: None
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 Sustain - Sustainability
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. Enroll Info: An ecology crse (eg, Botany/ZOOLOGY/BOTANY/F\&W ECOL 460)
Requisites: None
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 2020

## BOTANY/GENETICS/M M \& I/PL PATH 655 - BIOLOGY AND GENETICS OF FUNGI <br> 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. Enroll Info: Graduate or professional standing 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 2020

## 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. Analysis and interpretation of data; development of a team report. Enroll Info: a crse in ecology a crse in stats, or cons inst 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
BOTANY/F\&W ECOL/ZOOLOGY 672 - HISTORICAL ECOLOGY
2 credits.
Historical Ecology is an area of ecology that considers the importance of past events for current ecosystems. Concepts and applications are emphasized. Multidisciplinary emphasis, for seniors and graduate students in biological sciences, social studies, and humanities. Discussion format. Enroll Info: Graduate or senior standing and consent of instructor
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: No
Last Taught: Spring 2018
BOTANY 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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

## BOTANY 682 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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

## BOTANY 691 - SENIOR THESIS

2-3 credits.
Introduction to botanical research; if possible, plans for the thesis program should be made by the close of the junior year. Enroll Info: None
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

## BOTANY 692 - SENIOR THESIS

2-3 credits.
Continuation of 691. Enroll Info: None
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

## BOTANY 698 - DIRECTED STUDY

1-4 credits.
Enroll Info: Jr or Sr st. Graded on a Cr/N basis; requires cons inst
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.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020

## 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. Enroll Info: Grad st. Experience in modeling, programming, or stats
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
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. (Includes field trip to Great Smoky Mountains.) Enroll Info: Bot 455, 460, or Biocore 333, and intro calculus
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
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). Lecture and lab. Enroll Info: A crse in ecology or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## BOTANY/ENTOM/GENETICS/ZOOLOGY 820 - FOUNDATIONS OF EVOLUTION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## BOTANY/BIOCHEM/GENETICS 840 - REGULATORY MECHANISMS IN PLANT DEVELOPMENT <br> 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. Enroll Info: None
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.
Subjects vary. Lecture. Enroll Info: None
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

## 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. Enroll Info: BOTANY 500 or BIOCHEM 501 or 601
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## BOTANY/F\&W ECOL/ZOOLOGY 879 - ADVANCED LANDSCAPE ECOLOGY

 3 credits.Landscape ecology emphasizes spatial patterning-its development and importance for ecological processes--and often focuses on large regions. Concepts, methods, and applications of landscape ecology will be learned through lectures, readings, exercises in quantitative approaches, and an independent project. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
BOTANY/ATM OCN/CIV ENGR/ENVIR ST/GEOSCI/ZOOLOGY 911 LIMNOLOGY AND MARINE SCIENCE SEMINAR
1 credit.
Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst
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

BOTANY 920 - SEMINAR IN ALGOLOGY: FRESH WATER ALGAE 1 credit.

Enroll Info: None
Requisites: 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.
Enroll Info: None
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

## BOTANY 940 - SEMINAR IN PLANT SYSTEMATICS AND EVOLUTION

1 credit.
Enroll Info: None
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
BOTANY 941 - PLANT TAXONOMY JOURNAL REVIEW
1 credit.
Enroll Info: None
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.
Enroll Info: None
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

## BOTANY 951 - PLANT ECOLOGY JOURNAL REVIEW

1 credit.
Enroll Info: Grad st in plant ecol or cons inst
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. Enroll

## Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
BOTANY 960 - SEMINAR-PLANT PHYSIOLOGY
1 credit.
Enroll Info: Grad st
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
BOTANY/ATM OCN/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. Enroll Info: None
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.
Enroll Info: None
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.
Enroll Info: None
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

BOTANY 994 - RESEARCH-PLANT SYSTEMATICS
1-12 credits.
Enroll Info: None
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
BOTANY 995 - RESEARCH-PLANT ECOLOGY
1-12 credits.
Enroll Info: None
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
BOTANY 996 - RESEARCH-PLANT PHYSIOLOGY
1-12 credits.
Enroll Info: None
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

## BOTANY 999 - INDEPENDENT WORK

1-3 credits.
Enroll Info: None
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


CRB 610 - FUNDAMENTALS OF MAMMALIAN EMBRYOLOGY 2 credits.

Provides a thorough grounding in the conceptual basis of mammalian development using the mouse (and sometimes other species) as a model system. Enroll Info: None
Requisites: Senior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: BIOCHEM 501 or 507; or graduate/professional standing Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CRB 650 - MOLECULAR AND CELLULAR ORGANOGENESIS 3 credits.

Covers the most current knowledge of the basic principles of organogenesis including the molecular and cellular pathways leading to normal organ development and tissue regeneration. Tissue/organ specification, differentiation, and developmental processes, focusing on molecular and associated signal transduction pathways and transcriptional regulation will be covered in depth. Current understanding of the role of stem cells in normal and abnormal development and regenerative biology is included. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (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

## CRB 675 - TOPICS IN CELL AND REGENERATIVE BIOLOGY

1-3 credits.
Examines various special topics in Cell and Regenerative Biology. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101 and 102) or BOTANY/BIOLOGY 130 or (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: Fall 2020
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CRB 802 - BUSINESS OF BIOTECHNOLOGY: FUNDAMENTALS OF PRODUCT DEVELOPMENT <br> 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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info:

## None

Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CRB 810 - MOUSE GENETICS AND EMBRYONIC STEM CELLS: LAB IMMERSION AND UNDERSTANDING CURRENT LITERATURE <br> 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. Enroll Info: None
Requisites: MED SCI-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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CRB 841 - BUSINESS OF BIOTECHNOLOGY: CONTEMPORARY CHALLENGES AND APPLICATIONS <br> 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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CRB 842 - BUSINESS OF BIOTECHNOLOGY: SUSTAINING GROWTH 2 credits.

Examines how companies gain and sustain competitive advantages. To be successful, a company's strategy must permeate all departments and functional areas. Knowledge and skills gained from prior business courses (for instance, marketing, management, finance, accounting) will be applied to specific case studies exploring general corporate management and strategy with respect to the total enterprise. This discussion-based course draws heavily on experiential exercises to develop a deeper understanding of strategic management. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

CRB 844 - ADVANCED BIOTECHNOLOGY: GLOBAL PERSPECTIVES 4 credits.

Focuses on state-of-the-art topics of global importance. Designed as a capstone experience in which the skills and knowledge is integrated and applied to achieve a new level of synthesis and depth of understanding about an important problem in biotechnology today. A major goal is to deepen technical understanding of novel technologies, broaden awareness of ethical and regulatory issues in biotechnology globally, and increase awareness of opportunities for intellectual collaboration and entrepreneurship. Enroll Info: None
Requisites: Declared in the Biotechnology graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020

## CRB 845 - PROFESSIONAL DEVELOPMENT AND EFFECTIVE MANAGEMENT <br> 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. Enroll Info: None
Requisites: Declared in Biotechnology MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## CRB 850 - FUNDAMENTALS OF STEM CELL AND REGENERATIVE BIOLOGY <br> 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. Enroll Info: None
Requisites: MED SCI-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 <br> 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. Enroll Info: None
Requisites: MED SCI-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. Enroll Info: None
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

## 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. Enroll Info: So st Requisites: None
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Open to students in any field. Enroll Info: CHEM 329 or CHEM 343 or concurrent registration
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info:
MATH 319 or 320 or con reg

## Requisites: None

Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: MATH 234, PHYSICS 201 or equiv; CBE 255 or equiv or con reg; CBE 250 with a grade of C or better
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: CBE 310 with a grade of C or better
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CBE/B M E 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. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## CBE 324 - TRANSPORT PHENOMENA LAB

3 credits.
Determination of thermodynamic properties, transport properties, and transfer coefficients; study of related phenomena. Enroll Info: CBE 310 320, or concurrent registration; STAT 324
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: CBE 310320 with grades of C or better
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CBE/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. Enroll Info: None
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 2020
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 chemical engineering students with interests in biotechnology and synthetic biology. Enroll Info: CBE 250; Zoo 151 or 153 or equivalent; or consent of instructor
Requisites: None
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. Enroll Info: CBE 324, 326, 426 430; or consent of instructor
Requisites: None
Course Designation: Gen Ed - Communication Part B
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
CBE/CHEM/E M A/M E 425 - UNDERGRADUATE RHEOLOGY SEMINAR $0-1$ credits.

Rheology seminar encouraged for all interested in professions related to polymers, suspensions or rheology. Enroll Info: None
Requisites: Junior or senior standing only, 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: Fall 2011

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. Enroll Info: CBE 311
320 with grades of $C$ or better, or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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.
Enroll Info: CBE 311 320; or consent of instructor
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: CHEM 345
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

CBE 450 - PROCESS DESIGN
3 credits.
Analysis and design of chemical processing systems and equipment.
Enroll Info: CBE 326, 426430 or consent of instructor
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: CBE 326; CBE 430 or concurrent registration
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## CBE 489 - HONORS IN RESEARCH

1-3 credits.
Undergraduate honors research projects supervised by faculty members.
Enroll Info: Admission to CBE honors in research prgm
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019
CBE/CHEM 505 - ASPECTS OF INDUSTRIAL CHEMISTRY AND
BUSINESS FUNDAMENTALS
3 credits.
The objective of this course is to educate students in 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. Enroll Info: Junior standing and CHEM 345
Requisites: CHEM 345 and junior standing or higher
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

## CBE/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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: CBE 310 or M E 361, graduate/professional standing, or member of Engineering Guest Students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No

## CBE/B M E/BSE 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. Enroll Info: None
Requisites: Junior standing and (ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## CBE/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. Enroll Info: None
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 2020
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: nonNewtonian viscosity, linear viscoelasticity, normal stresses, recoil, stress relaxation, etc. Dimensional analysis. Unit operations of the polymer industry: extrusion, blow molding, injection molding, mixing. Enroll Info: None
Requisites: M E 363, B M E/CBE 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.
This course discusses catalytic phenomena, with extensions to reactor design and catalyst characterization. Examples will be drawn from current problems in catalysis. Enroll Info: CBE 430 or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2018

## CBE 538 - PROCESSES FOR THE PRODUCTION OF RENEWABLE FUELS AND CHEMICALS FROM BIOMASS <br> 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. Enroll Info: None
Requisites: CBE 250 and 310, graduate/professional standing, or member of Engineering Guest Students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No

## CBE 540 - POLYMER SCIENCE AND TECHNOLOGY

3 credits.
Synthesis, properties, and fabrication of plastic materials of industrial importance. Enroll Info: CHEM 345; CBE 326 430, or concurrent registration; STAT 324; or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## CBE 541 - PLASTICS AND HIGH POLYMER LABORATORY

1-3 credits.
Experiments on polymerization, fabrication, and testing of plastics. Enroll Info: CBE 540 or concurrent registration; or CHEM 664 or concurrent registration
Requisites: None
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. Enroll Info: None
Requisites: CHEM 561 or (CBE 310 and 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: Spring 2019

CBE 555 - SEMINAR-CHEMICAL ENGINEERING CONNECTIONS 1 credit.

Considers a variety of current engineering applications and problems.
Students will investigate background information on topics of their choice, and present seminars to describe how engineering fundamentals interact with societal impact and how our undergraduate education in chemical engineering is relevant to societal concerns at large. Enroll Info: Sr st or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (CBE 310 and B M E/CBE 320, or B M E/CBE 330) and (ZOOLOGY/BIOLOGY 101 and 102, 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

CBE 562 - SPECIAL TOPICS IN CHEMICAL ENGINEERING
1-3 credits.

Topics of specialized interest to majors in chemical engineering. Given on demand. Enroll Info: Jr st and cons inst
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (M E 364, CBE 326, or concurrent enrollment), or graduate/ professional standing, or member of Engineering Guest Students
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: CBE 324 or consent of instructor

Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## CBE 599 - SPECIAL PROBLEMS

1-4 credits.
Research or independent study. Enroll Info: None
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 2020

## 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. Enroll Info: Grad standing in CBE or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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. Enroll Info: Grad st in CBE or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CBE 699 - ADVANCED INDEPENDENT STUDIES

1-6 credits.
Research on assigned topics under the guidance of a qualified instructor. Enroll Info: None
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

## 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. Enroll Info: None
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
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. Enroll Info: Grad st in CBE or cons inst Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Students are expected to have had graduate course work in fluid mechanics or transport phenomena.
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: Grad st in CBE or cons inst
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. Enroll Info: Grad st in CBE or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: CBE 547 or cons inst 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. Enroll Info: Graduate standing in CBE or consent of instructor Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: Grad st in CBE or cons inst
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: 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.
Enroll Info: Grad st, for 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: Fall 2020
CBE 890 - PRE-DISSERTATOR'S RESEARCH
1-9 credits.
Enroll Info: Grad st, for post-master's, pre-dissertator stdts 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: Fall 2020
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. Enroll Info: None
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

## CBE 920 - SEMINAR ON ADVANCES IN TRANSPORT PHENOMENA

 1 credit.Critical review of recent and current research in transport phenomena and allied disciplines. Enroll Info: None
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
CBE/CHEM/E M A/M E 925 - RHEOLOGY RESEARCH SEMINAR
0-1 credits.
Exploration of the most recent research literature on viscoelasticity, constitutive equations, non-Newtonian flow systems, fluid metering devices, kinetic theory of macromolecules, and rheooptical phenomena. Periodic reports on recent advances made by research workers in the various rheology groups on the Madison campus. Enroll Info: None 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 2011

CBE/BIOCHEM 932 - BIOTECHNOLOGY TRAINING PROGRAM SEMINAR 1 credit.

Biotechnology Training Program trainees will present their research for critical review by audience. Enroll Info: Grad st. Required of Biotechnology Training Program trainees
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
CBE 961 - SEMINAR-CHEMICAL ENGINEERING
0-1 credits.
Enroll Info: None
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

CBE 970 - SEMINAR ON PROCESS ANALYSIS, SYNTHESIS, DYNAMICS AND CONTROL
1 credit.
Critical review of recent and current research in these areas. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
CBE 990 - THESIS-RESEARCH
1-12 credits.
Enroll Info: 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 2020
CBE 999 - ADVANCED INDEPENDENT STUDIES
1-6 credits.
Enroll Info: None
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.
Chemistry 101 is the laboratory only part of "Chemistry 103: General Chemistry I". CHEM 101 is intended only for students who have earned college credit prior to entering UW-Madison for a course that is equivalent to the lecture part of Chemistry 103, but not the laboratory part. Students need this lab experience or its equivalent before proceeding to Chemistry 104: General Chemistry II, the second semester of the General Chemistry sequence. Enroll Info: None
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 2020
CHEM 102 - GENERAL CHEMISTRY II LABORATORY
1 credit.
Chemistry 102 is the laboratory only part of Chemistry 104: General Chemistry II. CHEM 102 is intended for students who have earned college credit prior to entering UW-Madison for a course that is equivalent to the lecture part of Chemistry 104, but not the laboratory part. Students need this lab experience or its equivalent to proceed to any intermediate level chemistry courses such as Organic Chemistry (341 or 343), Analytical Chemistry (327 or 329), and Inorganic Chemistry (311). Enroll Info: None 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 2020
CHEM 103 - GENERAL CHEMISTRY I
4 credits.

Introduction. 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. For students taking one year or more of college chemistry; serves as a prereq for CHEM 104; lecture, lab and discussion. Enroll Info: None
Requisites: Suitable math placement score or completion of MATH 112,
MATH 114, MATH 171 or equivalent; not open to students who have taken 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: Fall 2020

## 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. Lecture, lab, and discussion. Enroll Info: None
Requisites: CHEM 103 and MATH 112, 114, or 171; not open to students who have taken 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: Fall 2020
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. First semester of a two-semester sequence for students taking one year or more of college chemistry; includes lecture and discussion. CHEM 105 is not open for general enrollment. The course provides a mechanism for awarding credit for experiences with no laboratory component, such as credit by examination. The combination of CHEM 101 and CHEM 105 is equivalent to CHEM 103. Enroll Info: None Requisites: MATH 112, 114, or 171 or placement into MATH 211 or 221. Not open to students with credit for CHEM 103, 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: Fall 2019
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. Second semester of a two-semester sequence for students taking one year or more of college chemistry; includes lecture and discussion. CHEM 106 is not open for general enrollment. The course provides a mechanism for awarding credit for experiences with no laboratory component, such as credit by examination. The combination of CHEM 102 and CHEM 106 is equivalent to CHEM 104. Enroll Info: None Requisites: CHEM 103 or (CHEM 101 and CHEM 105) and (MATH 112, 114, or 171 or placement into MATH 211 or 221). 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 2020

## CHEM 108 - CHEMISTRY IN OUR WORLD

5 credits.
Chemistry 108 is a one-semester introductory course that includes selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological, environmental and social issues. Chemistry 108 is not intended for students who expect to take additional chemistry courses and it does not satisfy any prerequisites for further chemistry courses. Enroll Info: Appropriate for students needing only one semester of chemistry. No HS chemistry required. 1 year HS chemistry is permitted. Open to first year students. Enrollment not permitted for students who have completed CHEM 104, 109 or 115
Requisites: Not open to students who have taken CHEM 104, CHEM 109, or CHEM 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 2020
CHEM 109 - ADVANCED GENERAL CHEMISTRY 5 credits.

A modern introduction to chemical principles that draws on current research themes. For students with good chemistry and mathematics background preparation who desire a one-semester coverage of general chemistry. Recommended for students intending majors in chemistry or allied fields. Lecture, lab, and discussion. Enroll Info: At least 1 year HS chemistry; placement into MATH 221 or higher or equivalent math proficiency. Open to first year students. Enrollment not permitted for those who have completed CHEM 104 or 115
Requisites: MATH 113, 114, or 171; not open to students who have taken CHEM 104 or CHEM 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 2020

## CHEM 115 - CHEMICAL PRINCIPLES I

5 credits.
For specially well qualified students majoring in chemistry or chemical engineering. Lecture, lab, and quiz. Enroll Info: Adv placement or adv HS chem, cr or con reg in MATH 221 or cons inst. Open to Fr
Requisites: CHEM 115 Student Group Required
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 2020

CHEM 116 - CHEMICAL PRINCIPLES II
5 credits.
Continuation of Chemistry 115. Chemistry 115 and 116 satisfy the requirements for general chemistry and introductory analytical chemistry; lecture, lab, and discussion. Enroll Info: CHEM 115 or cons inst. Open to

## Fr

Requisites: CHEM 116 Student Group Required
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 2020
CHEM 155 - STUDY ABROAD IN INTRODUCTORY CHEMISTRY
1-6 credits.
Provides equivalency for study abroad courses in introductory chemistry that do not equate to existing UW-Madison chemistry courses. Enroll Info: None
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 260 - ENTERING RESEARCH I
1 credit.
Seminar course designed primarily for sophomores or transfer students to begin independent research in chemistry. Taken concurrently with 1-3 research credits with faculty member. Supports independent research experience. Enroll Info: None
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: Fall 2020
CHEM 261 - ENTERING RESEARCH II
1 credit.
Seminar course for primarily sophomores or transfer students continuing independent research in chemistry. Taken concurrently with 1-3 research credits with faculty member. Supports independent research experience. Enroll Info: Must have taken CHEM 260, or completed at least one semester of research with a faculty member.
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 2016

## CHEM 299 - DIRECTED STUDY

1-4 credits.
Enroll Info: None
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
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. The weekly three-hour laboratory introduces students to the synthesis and characterization of inorganic compounds.. Enroll Info: CHEM 109 or 104. Open to Freshmen

Requisites: CHEM 104, CHEM 109, or CHEM 116
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 2020
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. Lecture, lab, and discussion. Enroll Info: None
Requisites: CHEM 104 or CHEM 109
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 2020
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. For chemistry majors, chemical engineering majors, and related majors. Lecture, lab, and discussion.
Enroll Info: None
Requisites: CHEM 104 or CHEM 109
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: Fall 2020

CHEM 341 - ELEMENTARY ORGANIC CHEMISTRY 3 credits.

Chemistry 341 is a single semester, terminal course covering selected topics in organic chemistry. Chemistry 341 is not equivalent to either Chemistry 343 or 345 and it does not satisfy the prerequisite for enrollment in Chemistry 345. Enroll Info: None
Requisites: CHEM 104, CHEM 109, or CHEM 116; not open to students who have taken CHEM 343 or CHEM 345
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 2020
CHEM 342 - ELEMENTARY ORGANIC CHEMISTRY LABORATORY 1 credit.

Chemistry 342 introduces organic laboratory techniques in synthesis, purification and spectral interpretation. The course is designed to accompany Chemistry 341 and topics closely follow Chemistry 341. Enroll Info: Completion of or concurrent enrollment in CHEM 341. For students who expect to take only one semester of organic chemistry and need only a single laboratory credit. Enrollment not permitted for students who have completed CHEM 344
Requisites: CHEM 341 or concurrent enrollment; not open to students who have completed CHEM 344
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 2020
CHEM 343 - INTRODUCTORY ORGANIC CHEMISTRY
3 credits.
Chemistry 343 covers fundamental aspects of organic molecular structure, including stereochemistry, and introduces basic themes in organic reactivity. It is the first semester of a two-semester organic chemistry sequence. Chemistry 345 is the second course in the sequence. Class is for students expecting to take two semesters of organic chemistry. Enroll Info: None
Requisites: CHEM 104, 109, or 116
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 2020

CHEM 344 - INTRODUCTORY ORGANIC CHEMISTRY LABORATORY 2 credits.

Chemistry 344 introduces the basic synthesis, purification, and characterization techniques of organic chemistry, along with critical interpretation of experimental data. The laboratory includes material from both Chemistry 343 and 345 . Enroll Info: None
Requisites: Completion of or concurrent enrollment in CHEM 345. May not repeat CHEM 344 if previously earned credit for CHEM 344
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 2020
CHEM 345 - INTERMEDIATE ORGANIC CHEMISTRY
3 credits.
Chemistry 345 is the second course of a two-semester sequence in organic chemistry. It covers diverse themes in organic reactivity, building on a foundation provided in Chemistry 343. Chemistry 341 does not satisfy the prerequisite for 345 . Enroll Info: None
Requisites: Grade of $C$ or better in CHEM 343
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 2020
CHEM 346 - INTERMEDIATE ORGANIC CHEMISTRY LABORATORY
1-2 credits.
Multi-step synthetic processes. Advanced experimental techniques such as high-vacuum distillation. Independent research projects. Enroll Info:

## None

Requisites: CHEM 344 and 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: Fall 2020

## CHEM 350 - COMMUNICATING CHEMISTRY TO THE PUBLIC VIA DEMONSTRATIONS

2 credits.
Through this course, students will gain experience in the safe and proper presentation of chemical demonstrations. They will join an experienced staff who enjoy doing demonstrations and who continue to develop the art of presenting them; students will learn from each other as well as 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). Enroll Info: None
Requisites: CHEM 103, 108 or 109
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
CHEM 355 - STUDY ABROAD IN INTERMEDIATE CHEMISTRY 1-6 credits.

Provides equivalency for study abroad courses in intermediate chemistry that do not equate to existing UW-Madison chemistry courses. Enroll Info:

## None

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

## CHEM 375 - INTERMEDIATE TOPICS IN CHEMISTRY

1-4 credits.
Various topics in chemistry at the intermediate level; intended for undergraduates. Offerings will require that students have completed a college level general chemistry course as a minimum. Additional requirements may apply depending on the topic. Enroll Info: None Requisites: Consent of instructor
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Spring 2020
CHEM/CBE/E M A/M E 425 - UNDERGRADUATE RHEOLOGY SEMINAR 0-1 credits.

Rheology seminar encouraged for all interested in professions related to polymers, suspensions or rheology. Enroll Info: None
Requisites: Junior or senior standing only, 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: Fall 2011

## CHEM/CBE 505 - ASPECTS OF INDUSTRIAL CHEMISTRY AND

 BUSINESS FUNDAMENTALS3 credits.
The objective of this course is to educate students in 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. Enroll Info: Junior standing and CHEM 345
Requisites: CHEM 345 and junior standing or higher
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
CHEM 509 - SENIOR SEMINAR
2 credits.
Senior Seminar provides an integrative experience that requires students to synthesize the knowledge and skills that have been introduced across the Chemistry curriculum. Through a series of seminars by faculty and advanced graduate students, specific research challenges will be identified. Groups of students will be formed and assigned the task of using the chemical literature to identify routes to the solutions of these problems, presenting their findings both in class presentations and written assignments. Enroll Info: CHEM 561 or CHEM 565; completion of or concurrent enrollment in CHEM 563

## 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: 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. Students majoring or intending to major in chemistry should take CHEM 311 prior to taking CHEM 511. Enroll Info: None
Requisites: Students must have junior standing AND have taken or be concurrently enrolled in 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: Spring 2020
CHEM 524 - CHEMICAL INSTRUMENTATION
3 credits.
Instrumental methods of measurements, as applied to modern chemical analysis; lecture and lab. Enroll Info: None
Requisites: CHEM 343, (CHEM 329 or 327), and PHYSICS (208 or 202)
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 2020
CHEM 547 - ADVANCED ORGANIC CHEMISTRY
3 credits.
A third semester of descriptive organic chemistry. Enroll Info: CHEM 345
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 2020
CHEM 555 - STUDY ABROAD IN ADVANCED CHEMISTRY 1-6 credits.

Provides equivalency for study abroad courses in advanced chemistry that do not equate to existing UW-Madison chemistry courses. Enroll Info: None
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. Enroll Info: CHEM 327 or 329; MATH 222; PHYSICS 201 or 207. Not for credit for those who have taken CHEM 565
Requisites: (CHEM 327 or CHEM 329), MATH 222, and (PHYSICS 201 or PHYSICS 207)
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 2020

## 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. Enroll Info: CHEM 561 or 565 or ChE 211; PHYSICS 202 or 208
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
Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 563 - PHYSICAL CHEMISTRY LABORATORY
1-2 credits.
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. Enroll Info: CHEM 561 or 565 or Ch E 211
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: Yes, for 2 number of completions
Last Taught: Fall 2020
CHEM 564 - PHYSICAL CHEMISTRY LABORATORY
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. Enroll Info: CHEM 562 and 563. Not for cr for those who have taken 567

## 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: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. For students interested primarily in the biological applications of physical chemistry. Enroll Info: CHEM 327 or 329; MATH 222; PHYSICS 201 or 207; Biocore 303, or BIOCHEM 501 or concurrent registration, or consent of instructor. Not for credit for those who have taken CHEM 561
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
Last Taught: Fall 2020
CHEM 567 - PHYSICAL CHEMISTRY LABORATORY
2 credits.
Principles of experimental physical chemistry applied to the acquisition of thermodynamic and kinetic data; acquisition and interpretation of basic data on molecular structure and dynamics, and properties of macromolecules; principles and use of spectroscopic and other electronic instrumentation use of basic physical laboratory equipment; related computations, analysis of errors, intepretation of results. Enroll Info: Cr or con reg in CHEM 562. Not for cr for those who have taken 563 or 564
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: Spring 2012
CHEM 575 - ADVANCED TOPICS IN CHEMISTRY
1-4 credits.
Various topics in chemistry intended for advanced undergraduates. Students enrolling in this course will be required to have completed at least a college level general chemistry course and some 300 level chemistry course work. Additional requirements may apply depending on the topic. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Spring 2020

CHEM 605 - SPECTROCHEMICAL MEASUREMENTS
3 credits.
Mass spectrometry and applied nuclear magnetic resonance. Two lecture sessions, or lectures, and one problem session per week. Enroll Info:
CHEM 562 or cons inst
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CHEM 606 - PHYSICAL METHODS FOR STRUCTURE DETERMINATION
1-3 credits.
A survey of spectroscopic methods for inorganic structure determination. This course will introduce the 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 stectroscopies, and magnetic susceptibility. Enroll Info: CHEM 511562 or cons inst. CHEM 608 or equiv recommended
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: CHEM 346 or cons inst

## 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: Spring 2020
CHEM 608 - SYMMETRY, BONDING, AND MOLECULAR SHAPES
1-3 credits.
This course provides a solid background in elementary bonding theory and its application to understanding molecular geometry and reactivity. The course emphasizes qualitative methods applied to the bonding of elements from throughout the periodic table. Enroll Info: None
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 2020

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. Enroll Info: CHEM 562 or cons inst
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
CHEM 621 - INSTRUMENTAL ANALYSIS
3-4 credits.
Chemical instrumentation, spectrochemical, electrochemical and other methods of instrumental analysis; lecture and lab. Enroll Info: Cr or con reg in CHEM 561 or cons inst

## 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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 622 - ORGANIC ANALYSIS
2 credits.
Biological Mass Spectrometry: Fundamentals and Applications. Enroll
Info: CHEM 345524 or consent of instructor
Requisites: CHEM 345 and CHEM 524; or graduate 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 2019
CHEM 623 - EXPERIMENTAL SPECTROSCOPY
2-3 credits.
The theory behind current spectroscopic methods employed in chemical analysis with applications in atomic and molecular absorption spectroscopy, infrared and Raman vibrational spectroscopy, flourescence and light scattering; lecture and laboratory projects. Enroll Info:
CHEM 562 or consent of instructor
Requisites: CHEM 562 or graduate 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 2020

## CHEM 624 - ELECTROCHEMISTRY

2-3 credits.
Theory of interfacial electron transfer and mass transport processes in electrochemistry, with applications to electroanalysis, electrodeposition and electrochemical separations; lecture and laboratory projects. Enroll Info: None
Requisites: Graduate Students Only
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

## CHEM 625 - SEPARATIONS IN CHEMICAL ANALYSIS

2-3 credits.
Fundamentals of transport processes and the origins of chemical potential differences giving rise to separation. Principles of chromatography, electrophoresis and field flow fractionation. Lecture and laboratory projects. Enroll Info: 1 sem organic 1 sem phys chem, or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM/GENETICS 626 - GENOMIC SCIENCE
2 credits.
This course is designed to bring cutting-edge topics in the genomic sciences into the reach of traditionally "pure" chemistry, biology, engineering, computer science statistics students. It is also designed for enabling biologically-oriented students to deal with the advances in analytical science so that they may incorporate new genomic science concepts into their own scientific repertoires. Intended for graduate students and for undergraduates with extensive research experience.
Enroll Info: None
Requisites: Graduate Students Only
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 2019

## CHEM/BMOLCHEM 627 - METHODS AND TECHNOLOGIES FOR PROTEIN CHARACTERIZATION

2-3 credits.
Seeks to engage students interested in chemical instrumentation and those who desire to apply proteomic technologies to current biological problems. Understanding the current proteomics landscape, the limitations of these technologies, and their practical applications are among the course learning objectives. Enroll Info: None
Requisites: 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
CHEM 628 - CHEMICAL INSTRUMENTATION: DESIGN AND CONTROL APPLICATIONS
3 credits.
The design and application of chemical instrumentation; basic principles for monitoring and controlling chemical experiments; optical, electrical and mechanical sensors and transducers of importance to analytical chemical instrumentation; lecture and lab. Enroll Info: CHEM 524, 621 or consent of instructor
Requisites: Prerequisites are CHEM 524 or 621 or graduate 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: Spring 2020
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\&S Credit - Counts 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

## CHEM 630 - SELECTED TOPICS IN ANALYTICAL CHEMISTRY

1-3 credits.
Lectures of a specialized nature in advanced analytical chemistry. Enroll Info: CHEM 524, 621 or cons inst

## 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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
CHEM 635 - TOPICS IN COMPUTATIONAL CHEMISTRY
1 credit.
This course is designed to give students a basic understanding of computational chemistry, which can be implemented within students' research. In addition, this course will discuss new techniques and developments in the literature, and specific types of calculations that are relevant to current students' research and needs. Enroll Info: None Requisites: Graduate Students Only
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: Yes, unlimited number of completions
Last Taught: Spring 2020
CHEM 636 - TOPICS IN CHEMICAL INSTRUMENTATION: INTRODUCTION TO NMR
2 credits.
This course will instruct students on the theory and practice of NMR spectroscopy. It is a full semester course, consisting of 15 hours of lecture and 30 hours laboratory instruction. Enroll Info: Enrollment will be limited based on available instrumentation for lab exercises
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 2020
CHEM 637 - TOPICS IN CHEMICAL INSTRUMENTATION: ADVANCED METHODS IN NMR
1-2 credits.
This course will instruct students on advanced methods of NMR spectroscopy. It is offered as a seven week module, consisting of 7 hours of lecture, 14 hours of laboratory instruction, 1 hour final exam. Enroll Info: Enrollment will be limited based on available instrumentation for lab exercises
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 2017

CHEM 641 - ADVANCED ORGANIC CHEMISTRY
3 credits.
Topics in physical organic chemistry. Enroll Info: CHEM 345 or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 652 - CHEMISTRY OF INORGANIC MATERIALS
3 credits.
Graduate level course on the 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. Enroll Info: Graduate student standing or CHEM 562 or equivalent
Requisites: CHEM 562 or graduate 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 2019
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. Enroll Info: Graduate student standing or both CHEM 311 and CHEM 561 or equivalent
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
Last Taught: Spring 2019
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.
Enroll Info: CHEM 562 or cons inst
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: Spring 2020

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. Enroll Info: CHEM 561 or 565, CHEM 562; or consent of instructor
Requisites: CHEM 562 or graduate 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
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. Enroll Info: CHEM 562 or consent of instructor
Requisites: CHEM 562 or graduate 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 2019

## 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. For graduate students interested in the biological applications of physical chemistry. Enroll Info: Grad st or cons inst. Stdts must meet prereqs for CHEM 565 have some prev background in phys chem
Requisites: Graduate 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

## 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 in this class include electronic absorption and fluorescence spectroscopy, circular dichroism, light scattering, fluorescence microscopy, multidimensional nuclear magnetic resonance and electron spin resonance. Enroll Info: CHEM 561 or equivalent. CHEM 562 or equivalent recommended
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 2019
CHEM 675 - INTRODUCTORY QUANTUM CHEMISTRY
3 credits.
Basic principles of quantum chemistry, exactly solvable problems, angular momentum, approximation methods, applications to electronic structure. Enroll Info: CHEM 562 or consent of instructor
Requisites: CHEM 562 or graduate 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
CHEM 681 - SENIOR HONORS THESIS
2-4 credits.
An independent and original study done under the direction of a member of the staff, recommended for seniors majoring in chemistry. CHEM 681 and CHEM 682 are taken in consecutive semesters. Students must enroll for a total of exactly 6 credits between the two courses, taking either 3 credits each semester or 2 credits one semester and 4 credits the other. Enroll Info: Honors candidacy
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 2020

## CHEM 682 - SENIOR HONORS THESIS

2-4 credits.
Continuation of 681. Students must enroll for a total of exactly 6 credits between CHEM 681 and 682, taking either 3 credits each semester or 2 credits one semester and 4 credits the other. Enroll Info: Honors candidacy
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 2020

## CHEM 691 - SENIOR THESIS

2-6 credits.
An independent and original study done under the direction of a member of the staff, recommended for seniors majoring in chemistry. Enroll Info:

## None

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 2020
CHEM 692 - SENIOR THESIS
2-6 credits.
Continuation of 691 Enroll Info: None
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
CHEM 699 - DIRECTED STUDY
1-6 credits.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020
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. Enroll Info: None
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 2020
CHEM 713 - INORGANIC AND ORGANOMETALLIC CHEMISTRY OF THE MAIN GROUP ELEMENTS
1-3 credits.
A modular course consisting of 1), inorganic and 2), organometallic chemistry of main-group elements and 3), organosilicon chemistry. Enroll Info: CHEM 511 or equivalent
Requisites: Graduate standing or CHEM 511
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CHEM 714 - ORGANOMETALLIC CHEMISTRY OF THE TRANSITION ELEMENTS <br> 2-3 credits.

Enroll Info: CHEM 511 or consent of instructor
Requisites: Graduate standing or CHEM 511
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: 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: Spring 2020

CHEM 758 - CHEMISTRY EDUCATION RESEARCH
2 credits.
An introduction to chemistry education research and the theories that underpin it. Models of learning will be developed and refined throughout the semester on the basis of primary literature discussed in-class. How theories of cognition could and should inform learning objectives and assessments in college chemistry learning environments will be explored. Substantial emphasis will be 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. No prior experience with coursework in the learning sciences is assumed. Appropriate for students engaged in discipline-based education research as part of a graduate degree, those interested in pursuing academic careers, and those broadly interested in scholarship related to teaching and learning. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 762 - MOLECULAR REACTION DYNAMICS
2-3 credits.
Microscopic approach to chemical dynamics. Enroll Info: CHEM 562 or cons inst
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. Enroll Info: CHEM 675 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

## 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. Enroll Info: None
Requisites: CHEM 561
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

CHEM 775 - ELECTRONIC STRUCTURE OF MOLECULES
2-3 credits.
Applications of quantum mechanics to the electronic structure and properties of molecules. Enroll Info: CHEM 675 or cons inst Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: CHEM 562 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
CHEM 801 - SELECTED TOPICS IN INORGANIC CHEMISTRY
1-3 credits.
Enroll Info: None
Requisites: 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
CHEM 841 - ADVANCED ORGANIC CHEMISTRY
3 credits.
Synthesis of simple and complex organic compounds. Enroll Info: CHEM 641
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CHEM 842 - ADVANCED ORGANIC CHEMISTRY
1-3 credits.
Selected topics. Enroll Info: None
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.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CHEM 860 - SELECTED TOPICS IN PHYSICAL CHEMISTRY
1-3 credits.
Enroll Info: None
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
CHEM 864 - STATISTICAL MECHANICS
2-3 credits.
Fundamentals of statistical mechanics; applications to equilibrium and non-equilibrium properties of gases and condensed phases; selected advanced topics. Enroll Info: CHEM 661675 or cons inst
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.
Enroll Info: None
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
CHEM 890 - HIGHLIGHTS AT THE CHEMISTRY-BIOLOGY INTERFACE 1 credit.

Includes oral presentations by students reporting their current thesis research at the chemistry-biology interface and discussions of reproducibility, rigor, and the responsible conduct of research. Intended for graduate student trainees in the UW-Madison NIH Chemistry-Biology Interface Training Program. Enroll Info: None
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

CHEM 900 - SEMINAR-INORGANIC CHEMISTRY
0 credits.
Enroll Info: None
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
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.
Enroll Info: None
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

CHEM 915 - SEMINAR-STRUCTURE AND BONDING IN INORGANIC COMPOUNDS
0-1 credits.
Enroll Info: None
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/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, patchclamping, cryo-electron microscopy, optical trapping, magnetic tweezers, and super resolution microscopy. Enroll Info: None
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
CHEM 920 - SEMINAR-ANALYTICAL CHEMISTRY
0 credits.
Prepared seminar covering diverse advanced topics. Enroll Info: None
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

CHEM 923 - GENOMIC SCIENCES PROGRAM SEMINAR
1 credit.
The Genomic Sciences Training Program (GSTP) seminar course brings together trainees, faculty trainers, and other interested faculty and students for cross-disciplinary exposure to cutting edge research in genomic sciences. Seminars are 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. Required for trainees in the Genomic Sciences Training Program. Enroll Info: None
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

CHEM/CBE/E M A/M E 925 - RHEOLOGY RESEARCH SEMINAR
0-1 credits.
Exploration of the most recent research literature on viscoelasticity, constitutive equations, non-Newtonian flow systems, fluid metering devices, kinetic theory of macromolecules, and rheooptical phenomena. Periodic reports on recent advances made by research workers in the various rheology groups on the Madison campus. Enroll Info: None
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 2011
CHEM 940 - SEMINAR-ORGANIC CHEMISTRY
0 credits.
Enroll Info: None
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
CHEM 941 - SEMINAR-SYNTHETIC ORGANIC CHEMISTRY
0-1 credits.
Enroll Info: None
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.
Enroll Info: None
Requisites: 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.

## Enroll Info: None

Requisites: 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.

Recent published research in chemical biology and related areas. Intended for advanced graduate students, and required of all NIH Chemistry-Biology Interface trainees. Enroll Info: None
Requisites: 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
CHEM 960 - SEMINAR-PHYSICAL CHEMISTRY
0-2 credits.
Enroll Info: None
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
CHEM 964 - SEMINAR: MOLECULAR DYNAMICS
$0-1$ credits.
Enroll Info: None
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
CHEM 990 - RESEARCH-ORGANIC
1-12 credits.
Enroll Info: None
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
CHEM 991 - RESEARCH GENERAL
1-12 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CHEM 992 - RESEARCH-PHYSICAL

1-12 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 993 - RESEARCH-ANALYTICAL
1-12 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 994 - RESEARCH-INORGANIC
1-12 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CHEM 995 - RESEARCH-MACROMOLECULAR CHEMISTRY
1-12 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
CHEM 996 - RESEARCH-MATERIALS CHEMISTRY
1-12 credits.
Graduate thesis research in materials chemistry. Enroll Info: None
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
CHEM 998 - RESEARCH-CHEMICAL BIOLOGY
1-12 credits.
Graduate thesis research in Chemical Biology. Enroll Info: None
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

## CHICANA/O AND LATINA/O STUDIES (CHICLA)

## CHICLA/AFROAMER/AMER IND/ASIAN AM/FOLKLORE 102 INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Sophomore standing
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 2019

## 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. Enroll Info: None
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: 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. Students will 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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Summer 2012
CHICLA 230 - TOPICS IN CHICANA/O AND LATINA/O STUDIES
3-6 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. Enroll Info: None
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 2013

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.
Enroll Info: None
Requisites: Freshmen 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: Spring 2020

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. Enroll Info:

## None

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 2020
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: 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: Fall 2019
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. Enroll Info: None
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
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. Enroll Info: None
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
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 Chicanx 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 Chicanx Latinx studies. Enroll Info: None
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 2020

CHICLA/CURRIC 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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

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, CubanAmerican, and Puerto Rican women. Interdisciplinary readings in law, journalism, public policy, history, and self-reflective literature. Enroll Info: None
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 2020
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.
Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None 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 2020
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. Enroll Info: None
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

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. Enroll Info: None
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
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 counterimages of Latino and Latina media producers also will be explored. Enroll Info: None
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 2013
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. Enroll Info: None
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

## CHICLA/HISTORY 435 - COLONY, NATION, AND MINORITY: THE PUERTO RICANS' WORLD <br> 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. Enroll Info: None
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: 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. Enroll Info:

## None

Requisites: C\&E SOC 140, 210, 211 , SOC 181, FOLKLORE/AFROAMER/
AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210,
CHICLA 230, POLI SCI/CHICLA 231, HISTORY/CHICLA/GEN\&WS 245,
LEGAL ST/SOC 131, or 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 2020
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. Enroll Info: None
Requisites: C\&E SOC 140, 210, 211 , SOC 181, FOLKLORE/AFROAMER/ AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, POLI SCI/CHICLA 231, HISTORY/CHICLA/GEN\&WS 245, LEGAL ST/SOC 131, or 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 2020
CHICLA/SPANISH 467 - US LATINO LITERATURE
3 credits.
Concentrates on analyzing the representation of the Latino and Latina experience in the US, as well as the linguistic, cultural and formal singularity of their literature. Traces the development of Hispanic/ Latino literature, its trends, the incorporation of newer Latino and Latina migrant communities in the US, question how it is defined, and address various issues concerning its poetics and present state. It will explore the intersectionality of ethnicity, class, gender, migration, sexuality, and literary forms. Enroll Info: None
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 2020

CHICLA/SPANISH 469 - TOPICS IN HISPANIC CULTURES IN THE U.S. 3 credits.

Focuses on the cultural evolution of Chicanos, Puerto Rican or CubanAmericans in relation to their countries of origin. Topics vary. Enroll Info: None

Requisites: SPANISH 361, 363, or 468; 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: Yes, unlimited number of completions
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: SOC 134, 170, 181, SOC/ASIAN AM 220, SOC/C\&E SOC 140, 210, 211, CHICLA 201, CHICLA 210, or POLI SCI/CHICLA 231; or graduate/professional 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
Last Taught: Spring 2020
CHICLA/LAND ARC 475 - LATINO URBANISM: DESIGN AND ENGAGEMENT IN THE AMERICAN CITY
3 credits.
Urban design in the 21 st 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. Enroll Info: None
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
Sustain - Sustainability
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: CHICLA 201, 230, /FOLKLORE/AFROAMER/AMER IND/
ASIAN AM/CHICLA 102, POLI SCI/CHICLA 231, or HISTORY/CHICLA/ GEN\&WS 245
Course Designation: Gen Ed - Communication Part B
Breadth - Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Summer 2020
CHICLA 510 - INTEGRATIVE SEMINAR IN CHICANA/O STUDIES 3 credits.

Examines the history of Chicana/o studies and contemporary theoretical debates in the field. Among the areas considered are the following: the project of interdisciplinarity; difference, identity, community; race and class formations; gender and sexuality; and critical praxis. Enroll Info: None
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 2014

## 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. Enroll Info: None Requisites: Junior standing or 6 credits of CHICLA
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

## CHICLA 530 - ADVANCED TOPICS IN CHICANA/O AND LATINA/O STUDIES <br> 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. Enroll Info: None
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 2020

## CHICLA/SOC WORK 657 - UNDERSTANDING LATINO FAMILIES AND COMMUNITIES <br> 3 credits.

Examines U.S. Latino families and communities, including social and economic conditions, cultural values, and issues of identity, race, gender, discrimination, acculturation and language. Gain knowledge of and direct experience with social work issues in Latino communities. Enroll Info:

## None

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 2012
CHICLA 699 - DIRECTED STUDY
1-3 credits.
Advanced independent research, readings or projects mentored by faculty. Enroll Info: None
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 2020

## 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. Enroll Info: So st
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CIV ENGR 152 - ARCHITECTURAL MAKING II
3 credits.
Survey and application of twentieth century design techniques in
architecture. Enroll Info: None
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. Enroll Info: None
Requisites: None
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No

## CIV ENGR 290 - CONSTRUCTION SYSTEMS

3 credits.
Course focuses upon the building construction industry. Buildings include many engineered systems, such as foundations, structural, and exterior cladding. Course addresses construction methods and techniques for sitework, excavation, paving, cast-in-place concrete, precast concrete, masonry, structural steel, and moisture protection. Course uses case examples of individual systems. Enroll Info: So st
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
CIV ENGR/G LE 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. Enroll Info: None
Requisites: E M A 202 or M E 240 or member of Engineering Guest

## Students

Repeatable for Credit: No
Last Taught: Fall 2020
CIV ENGR 299 - INDEPENDENT STUDY
1-3 credits.
Enroll Info: None
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. Enroll Info: MATH 234 EMA 202 or equiv
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 222 or 276; or graduate/professional standing; or member of Engineering Guest Students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: 1 year college chem
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: CIV ENGR 320
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## CIV ENGR/G LE 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (E M A 303 or M E 306) and M E/E M A 307; or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:

## STAT 311 or STAT 324

Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: CHEM 103, 109, or 115
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Meets with Civil Environmental Engineering 357. Enroll Info: None
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: Fall 2020

CIV ENGR 392 - BUILDING INFORMATION MODELING (BIM)
3 credits.
Provides students with an introduction to the use of Building Information Modeling (BIM) technology in the construction industry. The course allows students to gain experience in using computer tools such as the Autodesk Revit Family to model building designs. Enroll Info: M E 160 or ME 170
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: CIV ENGR 310311 or consent of instructor

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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). Enroll Info: CIV ENGR 311

## Requisites: None

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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: Civ Engr 315 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Summer 2020
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. Enroll Info: None
Requisites: (G L E/CIV ENGR 291 and CIV ENGR 311) or graduate standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## CIV ENGR 416 - WATER RESOURCES SYSTEMS ANALYSIS

 3 credits.Water supply and demand are increasingly stressed by climate, population, land-use, policy, etc. This course 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. Enroll Info: CIV ENGR 311 or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2019

## CIV ENGR/G LE 421 - ENVIRONMENTAL SUSTAINABILITY ENGINEERING <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
CIV ENGR 422 - ELEMENTS OF PUBLIC HEALTH ENGINEERING
3 credits.
Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
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. Enroll Info: Senior standing

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: CHEM 103 or equiv
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014

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. Enroll Info: CIV ENGR 310 or 316, CIV ENGR 320, or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: CIV ENGR 310 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: CIV ENGR 310, 320
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
CIV ENGR 429 - ENVIRONMENTAL SYSTEMS OPTIMIZATION
3 credits.
Design and analysis of complex environmental systems to capture policy trade-off in managing water, land, air, and energy resources. Illustration of models that describe decision variables and constraints to capture the full range of alternative policy choices. Heuristic and formal solution procedures to select best project alternatives. Enroll Info: Introductory calculus
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: CIV ENGR/G LE 330, 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/G LE 432 - INTRODUCTION TO SHALLOW AND DEEP FOUNDATION SYSTEMS <br> 1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures. Enroll Info: None
Requisites: CIV ENGR/G LE 330, 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/G LE 434 - INTRODUCTION TO UNDERGROUND OPENINGS ENGINEERING <br> 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. Enroll Info: None
Requisites: CIV ENGR/G LE 330 and concurrent enrollment in GEOSCI/ CIV ENGR/G L E/M S \& E 474, 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 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. Enroll Info: CIV ENGR 340
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

CIV ENGR 442 - WOOD STRUCTURES I
3 credits.
Properties of wood, basic concepts of structural design, design of wood structural members by LRFD including beams, columns and connections. Sawn, glued-laminated, sheathing and composite wood construction products. Concrete formwork. Enroll Info: CIV ENGR 340
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2016

## CIV ENGR/ENVIR ST/G L E/GEOSCI 444 - PRACTICAL APPLICATIONS OF GPS SURVEYING <br> 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. Enroll Info:
Math 210, 211, 221 or equiv or cons inst
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: CIV ENGR 340
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: CIV ENGR 340
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## CIV ENGR/I SY E/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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or STAT/MATH 431),
graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No

## CIV ENGR/G L E/GEOSCI/M S \& E 474 - ROCK MECHANICS

3 credits.
Classification of rock masses, stress and strain in rock, linear and nonlinear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications. Enroll Info: None
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 2020
CIV ENGR 489 - HONORS IN RESEARCH
1-3 credits.
Undergrad honors research projects supervised by faculty members. Not available for graduate credit. Enroll Info: None
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/BSE 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. Enroll Info: Sr st or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Jr st
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Spring 2020
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; linear and nonlinear optimization; linear programming; decision analysis and theory; economic analysis; uncertainty; non-monetary valuation; systems dynamics; and ethics in engineering. Enroll Info: None
Requisites: MATH 221 or 275; 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 2020
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. Enroll Info: PHYSICS 202
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: PHYSICS 202
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Junior standing or consent of instructor
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: Fall 2020
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. Enroll Info: CHEM 103, 104, 221 or equivalent or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CIV ENGR 501 - WATER ANALYSIS-INTERMEDIATE
3 credits.
Principles and applications of chemical and instrumental methods for the chemical analysis of water. Enroll Info: CHEM 103
Requisites: None
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. Enroll Info: None
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 2020
CIV ENGR/G LE 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. Enroll Info: None
Requisites: (CIV ENGR/G L E 291, COMP SCI 220, or ECE 203) and
(CIV ENGR 310 or 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: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: CIV ENGR 311 or consent of instructor

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## CIV ENGR 515 - HYDROCLIMATOLOGY FOR WATER RESOURCES MANAGEMENT

3 credits.
Students will be introduced 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. Students will consider both space and time variability of hydrological processes in the context of subseasonal, seasonal, and climate change time-scales. The course format will include lectures, discussion, student presentations, and role- playing. Enroll Info: None
Requisites: CIV ENGR 415 and STAT 224 (or CIV ENGR 315 prior to Spring 2018)

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CIV ENGR/G L E 520 - REACTIVE PROCESSES FOR SUSTAINABLE ENERGY AND RESOURCE PRODUCTION <br> 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. Enroll Info: None Requisites: Senior standing, (MATH 211, 217, 221, or 275), (CHEM 103, 104, or 109), and CIV ENGR 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

## 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. Enroll Info: CIV ENGR 320 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: CIV ENGR/G L E 330
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## CIV ENGR/G LE 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. Enroll Info: CIV ENGR/G L E 330 COMP SCI 310 or cons inst Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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). Enroll Info: None
Requisites: PHYSICS 201, 207, 247, E M A 201, or graduate/professional standing, or member of Engineering Guest Students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No

## CIV ENGR 543 - PRECAST CONCRETE

3 credits.
Design of structural systems using precast concrete components, capacity of prestressed components, fire ratings, connections and construction of precast systems. Enroll Info: CIV ENGR 447
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
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. Enroll Info: CIV ENGR 445
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info:

## CIV ENGR 447

Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. A 5-week practicum with applications to: agriculture and forestry, geology and soils, water quality, and urban and regional planning. Enroll Info: Civ Engr/Envir St/Forestry 303 or authorization
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 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 570 - ENVIRONMENTAL IMPACT OF TRANSPORTATION SYSTEMS <br> 3 credits.

Nature of the ecosystem and ecosystem modeling, the nature of transportation produced impacts on man's social, economic, physical and emotional well being, on wildlife, natural areas, agricultural areas; environmental economics; measuring and evaluating environmental quality, and citizen tactics in response to environmental issues. Enroll Info: Jr st or cons inst

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2012

## 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. Enroll Info: CIV ENGR 370 or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 recipeoriented practice. Enroll Info: None
Requisites: CIV ENGR 370 and (E C E 331, 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
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. Enroll Info: CIV ENGR 370
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: CIV ENGR 370 or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
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. Enroll Info: CIV ENGR/E M A 395
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: Completion of at least 1 crse which carries 3 cr of design
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CIV ENGR 579 - SEMINAR-TRANSPORTATION ENGINEERING
1 credit.
Current problems and research developments in transportation, highways, traffic engineering, and transportation planning and systems analysis. Enroll Info: Sr st
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
CIV ENGR 596 - CONSTRUCTABILITY ANALYSIS
3 credits.
Project facility delivery process; conceptual planning, design, construction, operation and maintenance, construction knowledge and experience, analysis of facility design from a construction perspective, constructability concepts. Enroll Info: Jr st
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2011
CIV ENGR 609 - SPECIAL TOPICS IN WATER CHEMISTRY
1-3 credits.
Given on demand. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
CIV ENGR/G LE 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-plantatmosphere continuum, application and development of models for simulating ecohydrologic processes, and case studies on ecohydrologic function and ecosystem services of varied environments. Enroll Info: None
Requisites: CIV ENGR 311,415, or GEOSCI/G LE 627, or graduate/ professional standing (or CIV ENGR 315 prior to Spring 2018)
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.
Enroll Info: 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 2020

## CIV ENGR 619 - SPECIAL TOPICS IN HYDROLOGY

1-3 credits.
Given on demand. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: CIV ENGR 322 or SOIL SCI/MICROBIO 523 or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2017
CIV ENGR 629 - SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING 1-3 credits.

Given on demand. Enroll Info: Sr st
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020
CIV ENGR/M\&ENVTOX/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. Enroll Info: None
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: Fall 2020

CIV ENGR/G LE 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. Enroll Info: CIV ENGR 320330
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
CIV ENGR 639 - SPECIAL TOPICS IN GEOTECHNICAL ENGINEERING 1-4 credits.

Given on demand. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
CIV ENGR 641 - HIGHWAY BRIDGES
3 credits.
Design applications in structural steel, reinforced and prestressed concrete to simple span and continuous highway bridges; AASHTO Specifications and loading applications; composite concrete-steel bridges; lateral and longitudinal forces on superstructure and substructure and substructuures; pier design; multicell box culverts. Enroll Info: CIV ENGR 445, 447
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
CIV ENGR 649 - SPECIAL TOPICS IN STRUCTURAL ENGINEERING 1-3 credits.

Given on demand. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

CIV ENGR 669 - SPECIAL TOPICS IN CONSTRUCTION ENGINEERING AND MANAGEMENT
1-4 credits.
Advanced topics of special interest to seniors and grad students in construction engineering and management. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020
CIV ENGR 679 - SPECIAL TOPICS IN TRANSPORTATION AND CITY

## PLANNING

3 credits.

Given on demand. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2019
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. Enroll Info: Grad st or cons inst, CIV ENGR 494 or equiv
Requisites: None
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.
Enroll Info: So st
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 2020

## 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. Enroll Info: CIV ENGR 500 or cons inst
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.

The course will cover 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. As part of the course, students will gain experience in presenting scientific research methods and results related to course materials. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CIV ENGR 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. Enroll Info: None
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

## CIV ENGR 703 - ENVIRONMENTAL GEOCHEMISTRY

3 credits.
This course will be 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. Additionally, we will discuss in-situ techniques for measurement of environmental reactions. This course is designed to appeal to graduate students who are interested in environmental chemistry, chemistry, limnology, geology, environmental microbiology, soil science, and environmental modeling. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CIV ENGR 704 - ENVIRONMENTAL CHEMICAL KINETICS

3 credits.
This course examines the fundamental molecular processes that govern the fate and transformation of organic contaminants in natural environmental systems and engineered treatment processes. We will emphasize the kinetics describing these processes and focus 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. Enroll Info: CIV ENGR 500; Graduate Standing
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Assumes basic knowledge of probability and statistics. Enroll Info: STAT 311 or cons inst
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.
This is the first of two seminars used for planning the activities of the Summer Session Water Resources Management Practicum (ENVIR ST/
CIV ENGR/URB R PL 719). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CIV ENGR/ENVIR ST/URB R PL 718 - WATER RESOURCES <br> MANAGEMENT PRACTICUM PLANNING SEMINAR II

2 credits.
This seminar is used for planning the field work, analysis and reporting of the Summer Session Water Resources Management Practicum (ENVIR ST/CIV ENGR/URB R PL 719). Enroll Info: Adv Grad standing or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## CIV ENGR/ENVIR ST/URB R PL 719 - WATER RESOURCES MANAGEMENT SUMMER PRACTICUM <br> 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. Enroll Info: Envir St/Civ Engr/URB R PL/ CIV ENGR/ENVIR ST 718 or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020

## 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. Enroll Info: Students must be accepted into an online Master of Engineering degree program
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## CIV ENGR 722 - CHEMICAL PRINCIPLES OF ENVIRONMENTAL ENGINEERING <br> 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. Enroll Info: Students must be accepted into an online Master of Engineering degree program
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## CIV ENGR 723 - ENERGY PRINCIPLES OF ENVIRONMENTAL ENGINEERING <br> 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. Enroll Info: None
Requisites: Declared in masters program in Civil and Environmental Engineering - Environmental Engineering
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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.
Enroll Info: CIV ENGR/G L E 330
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 geoengineering problems of flow and stability. Enroll Info: Grad st Civ Engr/GLE 330 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
CIV ENGR/G LE 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. Enroll Info: CIV ENGR/G LE 330 or consent of instructor
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 liquifaction; dynamic analysis of earth dams; settlements resulting from earthquakes, lateral earth pressures during earthquakes; foundation vibrations. Enroll Info: Civ Engr/EMA 530, EMA 545 or cons inst
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

3 credits.
Response of Single Degree of Freedom (SDOF) systems; numerical evaluation of dynamic response; earthquake response of SDOF systems; response spectra; Multi Degree of Freedom (MDOF) systems; natural frequencies and vibration modes; modal superposition; direct integration; damping of MDOF systems; earthquake response of MDOF systems; earthquake resistant design (basic principles) . Enroll Info: CIV ENGR 440 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
CIV ENGR 749 - SPECIAL TOPICS IN STRUCTURAL ENGINEERING 1-4 credits.

Advanced topics of special interest to graduate students in structural engineering. Enroll Info: None
Requisites: 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
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## CIV ENGR 790 - MASTER'S RESEARCH OR THESIS

1-9 credits.
Declared in a Civil Environmental Engineering or Environmental Chemistry and Technology graduate program. Enroll Info: None
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: Fall 2020

CIV ENGR 795 - CHARACTERIZATION OF ASPHALT BINDERS
3 credits.
Fundamentals of asphalt production methods, refining practices, and modification techniques. Asphalt rheological testing, linear and non-linear visco-elasticity, conventional and Superpave characterization techniques. The role of asphalt rheology in pavement response and pavement performance. Course includes hands-on training on using different rheometers used in binder grading systems. Enroll Info: CIV ENGR/ EMA 395 or 575
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## CIV ENGR 820 - HYDRAULICS AND APPLIED FLUID MECHANICS FOR ENVIRONMENTAL ENGINEERS <br> 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. Enroll Info: Students must be accepted into an online Master of Engineering degree program
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Declared in Master of Science in Civil and Environmental Engineering or Environmental Chemistry and Technology, or Master of Engineering in Civil and Environmental Engineering-Environmental Engineering Option
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CIV ENGR/URB R PL 839 - LAND USE AND COMMUNICATION SYSTEMS PLANNING
3 credits.
Application of systems analysis to the planning of land use and transportation systems; system modeling; environmental impacts; value measurement; decision-making strategies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
CIV ENGR 890 - PRE-DISSERTATOR'S RESEARCH 1-9 credits.

Enroll Info: For post-master's, pre-dissertator students
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: Fall 2020

CIV ENGR 909 - GRADUATE SEMINAR - ENVIRONMENTAL CHEMISTRY \& TECHNOLOGY
1 credit.

## Armstrong. Enroll Info: None

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
CIV ENGR/ATM OCN/BOTANY/ENVIR ST/GEOSCI/ZOOLOGY 911 LIMNOLOGY AND MARINE SCIENCE SEMINAR
1 credit.
Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst
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

## CIV ENGR 919 - SEMINAR-HYDRAULIC ENGINEERING AND FLUID

 MECHANICS1 credit.
Current research and review of literature in theoretical and applied fluid mechanics and hydraulic engineering. Enroll Info: None
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
CIV ENGR 929 - SEMINAR-ENVIRONMENTAL ENGINEERING
1 credit.
Current research and literature on water, wastewater, water pollution control, solid wastes engineering and management. Enroll Info: None 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
CIV ENGR 939 - GEOTECHNICAL ENGINEERING SEMINAR
1 credit.
Geotechnical analysis, design, and construction. Enroll Info: None
Requisites: 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

## CIV ENGR 949 - SEMINAR-STRUCTURAL ENGINEERING

1 credit.
Structural analysis, design, and construction. Enroll Info: None
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
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. Enroll Info: None 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.
Required for some M.S. and all Ph.D. degrees. Enroll Info: For students with dissertator status only
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: Fall 2020
CIV ENGR 999 - ADVANCED INDEPENDENT STUDY
1-9 credits.
Enroll Info: None
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

## 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. Enroll Info: None
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 2020
CSCS 130 - COMMUNITY NEWSWRITING
3 credits.
Newswriting of interest to individuals, families, and communities. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None

## Requisites: None

Repeatable for Credit: Yes, for 1 number of completions
Last Taught: Spring 2020
CSCS 299 - INDEPENDENT STUDY
1-3 credits.
Directed study projects for freshmen and sophomores as arranged with a faculty member. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2015

CSCS 335 - COMMUNICATING WITH KEY AUDIENCES
3 credits.
Comprehensive communication strategies for individuals, families, and communities. Enroll Info: None
Requisites: Sophomore standing
Repeatable for Credit: No
Last Taught: Fall 2020
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 multiorganization 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. Enroll Info: None
Requisites: CSCS 300
Repeatable for Credit: No
Last Taught: Fall 2020
CSCS 375 - SPECIAL TOPICS
1-4 credits.
Specialized subject matter of current interest to undergraduate students. Enroll Info: Requisite varies by topic
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Sophomore standing
Repeatable for Credit: No
Last Taught: Fall 2020

CSCS/CURRIC 427 - METHODS OF TEACHING FAMILY AND CONSUMER EDUCATION
3 credits.
Theory and principles of teaching and learning in family and consumer education. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Fall 2020

## CSCS 500 - GLOBAL HEALTH AND COMMUNITIES: FROM RESEARCH TO PRAXIS <br> 3 credits.

Explores global health and well-being from a community perspective and through the holistic lens of human ecology. Respectful communityengagement, 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 evidencebased practice. Learn basic principles of asset-based participatory community research and study, compare and contrast case examples from around the world. Enroll Info: None
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

## CSCS 501 - SPECIAL TOPICS

1-3 credits.
Specialized subject matter of current interest to undergraduate and graduate students. Enroll Info: 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: Fall 2020
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. Enroll Info: None
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 Enroll Info: None
Requisites: Junior standing, satisfied Quantitative Reasoning (QR) A requirement, and CSCS 300
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Senior standing and CSCS 345
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
CSCS 675 - GENERAL TOPICS
2-3 credits.
Specialized subject matter of current interest to graduate students. Enroll Info: 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: CSCS/M H R 742
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CSCS 990 - RESEARCH AND THESIS
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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

## CSCS 999 - INDEPENDENT STUDY

1-3 credits.
Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## 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. Challenges students to appreciate the roots of western civilization and to understand and interpret reflections of antiquity in today's society. Enroll Info: None
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
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.). Enroll Info: None
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

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. In this course we 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. We also 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. Enroll Info: None
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
CLASSICS 205 - GREEK AND LATIN ORIGINS OF MEDICAL TERMS
3 credits.
Enroll Info: None
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: Summer 2020

## CLASSICS 206 - CLASSICAL INFLUENCES ON WESTERN ART AND SCIENCE <br> 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. Enroll Info: None
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 2020

## CLASSICS/JEWISH/LITTRANS/RELIG ST 227 - INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH) <br> 4 credits.

Introduction to the literature and literary history of the Old Testament, Apocrypha, Dead Sea Scrolls, Talmud, and Midrashim. Enroll Info: Not open to students that have completed HEBR ST 217
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: No
Last Taught: Fall 2020
CLASSICS/JEWISH 241 - INTRODUCTION TO BIBLICAL ARCHAEOLOGY
4 credits.
An overview of archaeology and its relationship to understanding the
biblical world. Enroll Info: None
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
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. Enroll Info: None
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: Fall 2020
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. Enroll Info:

## None

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: Spring 2020

## CLASSICS 320 - THE GREEKS

3 credits.
Greek literature in translation with emphasis on its social background.
Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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

## CLASSICS 322 - THE ROMANS

3 credits.
Latin literature in translation with emphasis on its social background. Enroll Info: None
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: Summer 2020
CLASSICS 330 - ANCIENT EPIC
3 credits.
This course is an introduction to the epic poetry of Greece and Rome. The reading list will vary, with assigned texts selected from Homer's lliad and Odyssey, Apollonius' Argonautica, Virgil's Aened, Ovid's Metamorphoses, and Lucan's Civil War. The course will explore 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. The course will also explore the influence of ancient epic on literature from the middle ages to the modern period. Enroll Info Sophomore standing or consent of instructor
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: 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). Enroll Info: None
Requisites: 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. Enroll Info: Sophomore standing
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: No
Last Taught: Spring 2020
CLASSICS 340 - CONSPIRACY IN THE ANCIENT AND MODERN WORLDS 3 credits.

Focusing primarily on the world of the ancient Romans, (in translation) interrogates the phenomenon and notion of "conspiracy" within the political, social, and religious spheres. After investigating some of the more famous political conspiracies (e.g. the Catilinarian Conspiracy, assassination of Julius Caesar, etc.), turn to 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." Finally, consider a number of prominent religions that came into conflict with Roman authorities - especially the mystery cults surrounding Bacchus as well as early Christianity. Bring to bear the insights gleaned from the ancient world on the modern one in consideration of such modern conspiracies as the Salem Witch Trials, the Red Scare of the '50s, the Kennedy Assassination, and the Watergate Conspiracy. Enroll Info: Sophomore standing
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: No
Last Taught: Fall 2020

## CLASSICS/JEWISH/RELIG ST 346 - JEWISH LITERATURE OF THE GRECO-ROMAN PERIOD <br> 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. Enroll Info: Sophomore standing
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: No

Last Taught: Spring 2016
CLASSICS/ITALIAN 350 - ROME: THE CHANGING SHAPE OF THE ETERNAL CITY
3-4 credits.
Changing shape of Rome as a physical city and as a cultural metaphor from the Augustan age to the Renaissance. Enroll Info: Jr st or cons inst 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: No
Last Taught: Spring 2020
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. Enroll Info: None
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
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. Enroll Info: None
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

CLASSICS 370 - CLASSICAL MYTHOLOGY
3 credits.
Classical myths and their influence on later literature and art. Enroll Info: None
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 2020

## 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. Enroll Info: So st

## 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 2020

## 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. Enroll Info: So st
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 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. Enroll Info: Sophomore
standing
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: Fall 2020

## CLASSICS 376 - LOVE POETRY OF THE ANCIENT MEDITERRANEAN

 3 credits.Selections from the love poetry of four ancient cultures: Egypt, Greece, Israel, and Rome. We will read a variety of lyric poems in the context of their larger socio-historical settings, observing the culturally conditioned representations of desire. Enroll Info: None

## 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 2012
CLASSICS 420 - ANCIENT TEXTS, MODERN CONTEXTS
3 credits.
Enroll Info: None
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
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. Enroll Info: None

## 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: 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. Enroll Info: Junior standing
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: Spring 2018

## CLASSICS/JEWISH 452 - BIBLICAL ARCHAEOLOGY

2 credits.
Applies knowledge and skilled gained from the broad survey conducted in JEWISH/CLASSICS 451 to specific problems of Levantine archaeology. Students focus on in-depth analysis of material remains, geographic and topographic issues, and philological difficulties in ancient records describing the geography and history of the area. Students work separately and in teams to address these problems, conducting novel research, synthesizing their findings, and presenting the results of their research in archaeological reports. Enroll Info: None
Requisites: JEWISH/CLASSICS 451
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

## 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. Enroll Info: Sophomore Standing
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: Spring 2017
CLASSICS/HIST SCI/HISTORY/MED HIST/S\&A PHM 561 - GREEK AND ROMAN MEDICINE AND PHARMACY
3 credits.
Greek and Roman medicine and drug lore from the Pre-Socratics to Oribasius (c. 600 B.C. - A.D. 350), including the backgrounds of ancient Egyptian and Mesopotamian medicine. Enroll Info: None
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 2015
CLASSICS 568 - TOPICS IN CLASSICAL LITERATURE
1-3 credits.
Selected aspects of Greek and Latin literature (e.g., genres such as epic or drama), with special attention to the relationship between the two literary traditions. Enroll Info: Jr st
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
Last Taught: Spring 2014

## CLASSICS 591 - UNDERGRADUATE SEMINAR: APPROACHES TO THE CLASSICAL WORLD <br> 3 credits. <br> Enroll Info: At least 1 sem of Greek or Latin; chiefly for classical humanities, classics majors, or honors stdts <br> Requisites: None <br> Course Designation: Level - Intermediate <br> L\&S Credit - Counts as Liberal Arts and Science credit in L\&S <br> Repeatable for Credit: Yes, unlimited number of completions <br> Last Taught: Spring 2020

CLASSICS 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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
CLASSICS 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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 2020
CLASSICS 691 - SENIOR THESIS
3 credits.

## Enroll Info: None

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
CLASSICS 692 - SENIOR THESIS
3 credits.
Enroll Info: None
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
CLASSICS 699 - DIRECTED READING
1-3 credits.
Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
CLASSICS/HISTORY 801 - SEMINAR-ANCIENT HISTORY
1-3 credits.
Special problems in Greek and Roman history studied in alternate years.
Enroll Info: Grad st reading knowledge of appropriate foreign 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: Spring 2019
CLASSICS/PHILOS 830 - ADVANCED HISTORY OF PHILOSOPHY
3 credits.
Enroll Info: None
Requisites: 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
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. Enroll Info: None
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.This seminar is intended for graduate students in Classical and Ancient Near Eastern Studies who are enrolled in either the Classics option or the Hebrew Bible option. The aims of the seminar are to improve students' research skills, to help them 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. Enroll Info: None
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

## CLASSICS 970 - CLASSICAL LITERATURE AND CULTURE

3-4 credits
Examines central literary and cultural issues in classical antiquity from both Greek and Roman perspectives. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## COLLABORATIVE NURSING PROGRAM (CNP)

CNP 306 - TRANSITIONS: PRACTICE, PROFESSIONAL AND PERSONAL 3 credits.

This course is designed to advance students' 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. Enroll Info: Admission to the BSN@Home Program or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Admission to the BSN@Home Program or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Nursing (Collaborative Program)
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: BSN@Home student or consent of instructor Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Nursing (Collaborative Program)
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: BSN@Home student or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:
BSN@Home student or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CNP 454 - COMMUNITY HEALTH NURSING
3 credits.
Nursing care of populations and communities to facilitate optimal health outcomes. Enroll Info: BSN@Home student or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Nursing, BSN (Collaborative Program); and CNP 306, 407, 441, 446, 447, 453, and 454 or concurrent enrollment Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Students who are required to take the MSN ESLAT cannot enroll unless they have satisfied the ESL 118 requirement. 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: Fall 2020

## COM ARTS 105 - PUBLIC SPEAKING

2 credits.
Development of fundamental skills in the preparation, delivery, and evaluation of the common forms of public address. Students desiring honors should elect 181. Enroll Info: None
Requisites: Not open to students who have 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 students the skills they need to produce, engage with, and understand new and emerging technologies within the context of communication and creative expression. Students will become more critical consumers and producers of digital media. Enroll Info: Undergraduate career students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special careers)
Requisites: Undergraduate students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, 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: Fall 2020
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. Enroll Info: None
Requisites: Students who are required to take the MSN ESLAT cannot enroll unless they have satisfied the ESL 118 requirement. Not open to students who have credit for COM ARTS 100 or 105.
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 2020
COM ARTS 198 - DIRECTED STUDY
1-3 credits.
Enroll Info: Open to Fr So only. Graded on a Cr/N basis; requires written cons inst
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.
Enroll Info: Open to Fr So only. Graded on a lettered basis; requires written cons inst
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. Students will develop digital communication skills, explore digital media tools and trends, and examine expressions of power online. Enroll Info: None
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
COM ARTS 210 - TOPICS IN COMMUNICATION ARTS
3 credits.
Introductory exploration of a current topic in Communication Arts. Enroll Info: Varies with topic
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 2012
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. Enroll Info: None
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
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. Enroll Info: None
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

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. Enroll Info: None
Requisites: None
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 2020

## COM ARTS 263 - SPEECH COMPOSITION

3 credits.
Application of rhetorical theory to composition, study of model speeches, and writing of speeches. Enroll Info: COM ARTS 100 or 181 or cons inst Requisites: None
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: Summer 2011
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. Enroll Info: None
Requisites: Not open to students who have taken COM ARTS 276
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: 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. Enroll Info: None
Requisites: Not open to students who have taken COM ARTS 273 or COM

## ARTS 276

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: Fall 2020

## 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. Does not satisfy the Com B requirement. Enroll Info: None
Requisites: Students who have taken Communication Arts 272 or 276 may not enroll in this course.
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## COM ARTS 288 - HONORS SEMINAR IN COMMUNICATION ARTS

 3 credits.Freshmen/Sophmore Honors seminar. Topic varies. Enroll Info: Fr So only
Requisites: Declared in honors program
Course Designation: 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: Fall 2011

COM ARTS 298 - DIRECTED STUDY
1-3 credits.
Enroll Info: COM ARTS 198 or Jr st. Graded on a Cr/N basis; requires cons inst
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 2014

## COM ARTS 299 - DIRECTED STUDY

1-3 credits.
Enroll Info: COM ARTS 199 or Jr st. Graded on a lettered basis; requires cons inst
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 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. Enroll Info: None
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 2020

COM ARTS 310 - TOPICS IN RHETORIC AND COMMUNICATION SCIENCE 3 credits.

Students explore a topic in rhetoric or communication science; the topic varies from semester to semester. Enroll Info: None
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

## COM ARTS 313 - TOPICS IN FILM AND MEDIA STUDIES

3 credits.
Students explore a topic in film and media studies, history, and theory; the topic varies from semester to semester. Enroll Info: None
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
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.
Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## COM ARTS 345 - ONLINE COMMUNICATION AND PERSONAL RELATIONSHIPS <br> 3 credits.

Examines how personal relationships unfold in online communication contexts (social network sites, online dating, video games). Topics include impression formation and management, deception and trust, selfperception and identity, social support and relationship maintenance.
Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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.
Enroll Info: None
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: Fall 2020

## COM ARTS 350 - INTRODUCTION TO FILM

3 credits.
Explains how films work using classics such as CITIZEN KANE, VERTIGO, BATTLESHIP POTEMKIN, THE MATRIX, and DO THE RIGHT THING (all shown during the "lab" screenings). Students 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. They learn to recognize film techniques--mise-en-scène, cinematography, editing, and sound--and to analyze how filmmakers make us watch, think, and feel.
Enroll Info: Sophomore standing or COM ARTS 250
Requisites: Sophomore standing or COM ARTS 250
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 2020

## 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. Enroll Info: Sophomore standing or COM ARTS 250
Requisites: Sophomore standing or COM ARTS 250
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 2020

## 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. Enroll Info:
COM ARTS 350 or cons inst
Requisites: COM ARTS 350 or declared in Communication Arts MA or PhD
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 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. Enroll Info: None
Requisites: COM ARTS 350
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 2020
COM ARTS 355 - INTRODUCTION TO MEDIA PRODUCTION
4 credits.
Theory and practice of media production and screenwriting. Enroll Info: Sophomore standing or COM ARTS 155
Requisites: Sophomore standing or COM ARTS 155
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 2020

## 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. Enroll Info: None
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 2020
COM ARTS 358 - HISTORY OF DOCUMENTARY FILM
3 credits.
Development and history of documentary film and video from Lumiere to the present. Enroll Info: COM ARTS 350 or cons inst
Requisites: COM ARTS 350 or declared in Communication Arts MA or PhD
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

## 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. Enroll Info: None
Requisites: COM ARTS 250 or 351
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 2020

## COM ARTS 360 - INTRODUCTION TO RHETORIC IN POLITICS AND CULTURE <br> 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Enrollment limited to students with at least sophomore standing and completion of QRA 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 2020

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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None 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 2020
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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2020

## COM ARTS/RELIG ST 374 - THE RHETORIC OF RELIGION

3 credits.
Rhetorical character of religious controversy and sectarian persuasion in Western religion. Enroll Info: None
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
COM ARTS 375 - ETHICS OF ENTERTAINMENT MEDIA
3 credits.
Students 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, we will 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. Enroll Info: None
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 2019
COM ARTS 376 - TOPICS IN DIGITAL STUDIES (RADIO, TELEVISION, \&
FILM)
3 credits.

Students explore topics in film and media studies, with a digital focus.
Enroll Info: Sophomore standing
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

## COM ARTS 377 - TOPICS IN DIGITAL STUDIES (COMMUNICATION

 SCIENCE \& RHETORIC)3 credits.
Explore topics in communication science and rhetoric, with a digital focus. Enroll Info: None
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 2020

## COM ARTS 400 - THE FILMS OF ALFRED HITCHCOCK

3 credits.
Studies the major films of Alfred Hitchcock. Investigates the enduring power of his movies; contributions to genre and popular cinema; storytelling techniques; stylistic mastery; approach to romance, suspense, and action; status as an American auteur; and control over the audience's thoughts and feelings. Enroll Info: COM ARTS 350 or consent of the instructor
Requisites: COM ARTS 350 or declared in Communication Arts MA or PhD
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

COM ARTS 402 - THE PSYCHOLOGY OF COMMUNICATION
3 credits.

The role and function of information processing in human communication behavior. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Must have grad standing or have taken one of the following courses: Gender \& Women's Studies 101, 102, or 103, or Gender \& Women's Sociology 200, or Communication Arts 250
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 2019

## 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 counterimages of Latino and Latina media producers also will be explored. Enroll Info: None
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 2013
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. Enroll Info: COM ARTS/CHICLA 347 or So st
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
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.
Enroll Info: None
Requisites: COM ARTS 250 is a prereq for the course.
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 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. This class will introduce you to the emerging field of sound studies and encourage you to investigate the role sound and music (or lack thereof) play in various communications media. Through audio assignments such as the creation of podcasts, we will learn the basics of digital audio recording and editing software and how to present and distribute audio content via the Internet, specifically as podcasts. By the end of this class, you will have both 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. Enroll Info:
None
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: Summer 2020
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. Enroll Info: None
Requisites: COM ARTS 250 is a prereq for the course.
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

## COM ARTS 451 - TELEVISION CRITICISM

## 3 credits.

Analysis of selected television programming, interpretation of contemporary television programs, and survey of existing critical approaches. Enroll Info: None
Requisites: COM ARTS 351
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

## COM ARTS 454 - CRITICAL FILM ANALYSIS

3 credits.
Intensive analysis of selected films, using contemporary critical theories and methods. Enroll Info: COM ARTS 350 Junior Standing
Requisites: Prerequisite: Communication Arts 350 \& Junior Standing or Communication Arts Graduate Student
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 2019
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. Enroll Info: COM ARTS 350 or cons inst
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 2018

## COM ARTS 456 - RUSSIAN AND SOVIET FILM

3 credits.

Survey of Russian and Soviet cinema from the pre-Revolutionary era to the present. Works by major filmmakers will be viewed and discussed in the context of cultural politics. Enroll Info: COM ARTS 350 or coursework in Russian area studies
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: Spring 2018
COM ARTS 458 - GLOBAL MEDIA CULTURES
3 credits.
Analysis of media systems, practices and uses from a global perspective. Enroll Info: None
Requisites: COM ARTS 351
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. Enroll Info: None
Requisites: COM ARTS 346
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 film and of the relationship between film and the other arts. Consideration of film theory and of the Italian and European socio-political situation in the context of film production. Enroll Info: Stdts taking crse for cr toward Ital major must have Ital 204 or equiv; all other stdts must have COM ARTS 350 or cons inst
Requisites: None
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 2020
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. This course explores art cinema from a variety of national and transnational contexts, analyzing its narratives, styles, and cultural contexts. It 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. Enroll Info: None
Requisites: COM ARTS 350
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 2018

## 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. Enroll Info: COM ARTS 350
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.
Studies the history, aesthetics, and cultural currency of avant-garde film from its beginnings in the late 1910s to the 2000s. Analyzes the nature of avant-gardism; key artistic objectives, movements, and trends; specific aesthetic and rhetorical techniques; dynamics of influence and differentiation within cinematic domains and across movements in modern art and critical theory, including Symbolism, Dada, Surrealism, Abstract Expressionism, Minimalism, Pop Art, Postmodernism. Enroll Info: None
Requisites: COM ARTS 354 is a pre-req for this course.
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 2020
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). Assignments include editing a short film, color correction, sound editing/mixing and editing half of an assigned feature-length film. Enroll Info: When offered during the fall or spring semester, students need to submit an advanced production application to be considered for the course. When offered during the summer, no application is required.
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: Fall 2020
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. Enroll Info: COM ARTS 355 cons inst
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 2020

COM ARTS 467 - CINEMATOGRAPHY AND SOUND RECORDING 4 credits.

Learn the fundamentals of sync-sound moving image production, including cinematography, lighting, sound recording, and production logistics. With an emphasis on dramatic visual storytelling, students will produce scenes from existing scripts, rotating the positions of director of photography, assistant camera, gaffer, mixer, and boom operator for each script. Additionally, directing, editing, and color grading will be covered, and students will be responsible for casting, location scouting, and setbuilding in order to successfully produce each scene. Students will leave the course knowing the interworkings of a film crew, the operation of digital cinema technologies, and have a better understanding of visual and aural storytelling aesthetics and techniques. Enroll Info: When offered during the fall or spring semester, students need to submit an advanced production application to be considered for the course. When offered during the summer, no application is required.
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: Fall 2020

## 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. Work in groups to produce videos across three Internet video genres-music video, comedy short, and commercial. All will occupy the role of the producer for one of the assignments. Additionally, complete a final project that is a business plan for a new Internet TV program or venture. Enroll Info: When offered during the fall or spring semester, students need to submit an advanced production application to be considered for the course. When offered during the summer, no application is required.
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 2018

## COM ARTS 469 - INTERDISCIPLINARY STUDIES IN THE ARTS

 1-4 credits.Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None
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 2013

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. Enroll Info: None
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

## 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. Enroll Info: None
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. Students apply these methods to landmark historical and contemporary texts - from presidential war discourse to women's suffrage rhetoric to timely political debates. Enroll Info: None
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 2018

## 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. Enroll Info: None 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 2019

COM ARTS 509 - DIGITAL MEDIA AND POLITICAL COMMUNICATION 3 credits.

Course 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. Enroll Info: None
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
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. Enroll Info: 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: Fall 2001

## COM ARTS/FOLKLORE 522 - DIGITALLY DOCUMENTING EVERYDAY COMMUNICATION <br> 3 credits.

Teaches the use of digital recording technologies, archiving, and analysis of everyday communication and culture. Surveys scholarly approaches to everyday expressive communication. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Spring 2017
COM ARTS 525 - MEDIA, DELIBERATION, AND PUBLIC ISSUES
3 credits.

In our contemporary media environment, more news about politics is created and consumed than ever before, but by smaller and smaller numbers of people than in previous decades. In this class we 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. Enroll Info: None
Requisites: COM ARTS 260
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

## 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. Enroll Info: COM ARTS 250 351; Jr st
Requisites: COM ARTS 250 and COM ARTS 351
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 2019

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. Enroll Info: None
Requisites: COM ARTS 250 and (COM ARTS 351 or 346) and 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 2019

## 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. It surveys the work of major directors and considers the box office impact of key genres and film cycles. Among the films screened in the course are DIE HARD, TOY STORY, INGLOURIOUS BASTERDS and INCEPTION. Enroll Info: None
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 2020
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. Enroll Info: COM ARTS 350
Requisites: COM ARTS 350 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: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Prereq: COM ARTS 350 or 351
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 2015
COM ARTS 560 - COMMUNICATION THEORY
3 credits.
Introduction and survey of contributions of behavioral science and philosophy to a unified theory of communication. Enroll Info: None
Requisites: COM ARTS 260
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 2013
COM ARTS 562 - THEORIES OF DELIBERATION AND CONTROVERSY 3 credits.

Examination of theories of deliberation and controversy. Application of theories to public controversies. Enroll Info: Jr st COM ARTS 262 or cons inst

Requisites: COM ARTS 262 is a pre-req
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
COM ARTS 565 - COMMUNICATION AND INTERETHNIC BEHAVIOR 3 credits.

The relation of communication processes to interethnic and interracial attitudes and behovior. 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. Enroll Info: None
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
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Students must have completed two of the following courses: COM ARTS 262, 360, 370, 372, 374, 470, 472, or 562
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

## COM ARTS 571 - CONTEMPORARY RHETORICAL THEORY

3 credits.

Study of contemporary theories of rhetoric and significant conceptual issues in contemporary rhetorical inquiry. Attention to theorists within the field of rhetoric as well as to others who have influenced rhetorical theory. Enroll Info: None
Requisites: Students must have completed two of the following courses:
COM ARTS 262, 360, 370, 372, 374, 470, 472, or 562
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 2014

## COM ARTS 573 - RHETORIC OF GLOBALIZATION AND <br> TRANSNATIONALISM

3 credits.

Students are introduced 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. Enroll Info: Junior Standing
Requisites: None
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 2017

## COM ARTS 574 - RHETORIC OF US IMMIGRATION AND <br> NATURALIZATION <br> 3 credits.

Students explore 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. Enroll Info: Junior standing
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
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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: Prior crse on research methods in the social sciences (e.g., COM ARTS 361, PSYCH 210, SOC/C\&E SOC 360 or Stats 301). Cons inst required for other methods crses.
Requisites: Prereq: A research methods course in the social sciences, specifically COM ARTS 361, PSYCH 210, SOC/C\&E SOC 360 or Stats 301. Instructor approval required for other methods courses.
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

## COM ARTS 605 - DIGITAL STUDIES CAPSTONE

1 credit.
Students synthesize the material they have learned throughout the Digital Studies certificate program and explore opportunities for professional and personal growth based on their experience. To enroll, students must be in the Digital Studies Certificate student and be seniors. Enroll Info: None
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
COM ARTS 608 - SPECIAL TOPICS IN MEDIA AND CULTURAL STUDIES 3 credits.

Specialized topics and issues in media and cultural studies. Enroll Info:
Varies with topic
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: Fall 2020
COM ARTS 609 - SPECIAL TOPICS IN PRODUCTION
3 credits.
Specialized advanced subject matter in film, video or digital media production. Enroll Info: COM ARTS 355 or cons inst
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: Fall 2020
COM ARTS 610 - SPECIAL TOPICS IN RHETORIC AND PUBLIC ADDRESS 3 credits.

Specialized subject matter of current interest in rhetoric and public address. Enroll Info: Varies with topic
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: Fall 2020

COM ARTS 612 - SPECIAL TOPICS IN COMMUNICATION SCIENCE 3 credits.

Specialized subject matter of current interest in communication theory and research. Enroll Info: Varies with topic
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: Fall 2020

## COM ARTS 613 - SPECIAL TOPICS IN FILM

3 credits.
Specialized topics and issues in film history, theory, and criticism. Enroll Info: Varies with topic
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: Fall 2020

## 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.(Does not count toward the 30-credit requirement for undergrad majors in communication arts.) Enroll Info: Undergrad com arts majors only; apprvl of specific intrnshp design by com arts undergrad advisor
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: Fall 2020

## COM ARTS 615 - SECOND FIELD EXPERIENCE IN COMMUNICATION

 1 credit.Application of communication concepts to problems in such field settings as business organizations, media firms, political offices and organizations, and governmental agencies. (Does not count toward the 30 -credit requirement for undergrad majors in communication arts.) Enroll Info: COM ARTS 614; Undergrad com arts majors only; apprvl of specific intrnshp design by com arts undergrad advisor
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: Fall 2020
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. Enroll Info: None
Requisites: JOURN 202, COM ARTS 325, HDFS 362, 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 2020

## 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. Enroll Info: None
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
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. Enroll Info: None
Requisites: 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
COM ARTS 651 - ADVANCED VIDEO PRODUCTION AND DIRECTION 3 credits.

Remote video production in both documentary and narrative genres. Enroll Info: COM ARTS 355 written cons inst
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: Spring 2020
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. Enroll Info: For German cr. one 300 level crse or above; or cons inst. For com arts cr. COM ARTS 350
Requisites: None
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 2015

## COM ARTS 659 - ADVANCED MOTION PICTURE PRODUCTION WORKSHOP <br> 4 credits.

A capstone course in digital cinema. Provides students with an immersive experience in the art of visual and aural storytelling. This 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: director, production manager, cinematographer, camera assistant, gaffer, sound designer, art director, and editor. Working with an existing script and using state-of-the-art digital tools, students will gain knowledge in a wide variety of motion-picture production skills. Most importantly, students explore the meanings and nuances of a script, making the artistic choices necessary to bring the story to the screen. Students learn to collaborate as a group, balancing the responsibilities of their role with the needs of their fellow crew and the finished film. At the conclusion of the semester, the class present their completed film in a public, campus screening. Enroll Info: Consent of 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 2020

## COM ARTS 667 - HISTORY OF AMERICAN PUBLIC ADDRESS

3 credits.

Public discourse of selected movements and periods in American history. Enroll Info: None
Requisites: Two of the following: COM ARTS 360, $370,372,374,470,472$, $570,571,576$, or 675
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 2013

## COM ARTS 669 - FILM THEORY

3 credits.
Survey of significant trends within both classical and contemporary film theory. Designed for serious students 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. Enroll Info:
None
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: Fall 2019

## COM ARTS 671 - COMMUNICATION AND SOCIAL CONFLICT

3 credits.
Survey of current theory and research on conflict in face-to-face interaction. Enroll Info: Com Arts 572 or 560 or cons inst
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 2014

## COM ARTS 681 - SENIOR HONORS THESIS

3 credits.
Enroll Info: Sr st. Member of the honors program cons inst
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
COM ARTS 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Sr st. Member of the honors program cons inst
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

## COM ARTS 691 - SENIOR THESIS

2-3 credits.
Enroll Info: Sr st 3.25 GPA and written cons inst
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 2014
COM ARTS 692 - SENIOR THESIS
2-3 credits.
Enroll Info: COM ARTS 691 written cons inst
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 2014

## COM ARTS 698 - DIRECTED STUDY

1-3 credits.
Enroll Info: Jr or Sr st. Graded on a Cr/N basis; requires written cons inst 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 2020
COM ARTS 699 - DIRECTED STUDY
1-3 credits.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires written cons inst
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

COM ARTS/LIS 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. Enroll Info: None
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 2020
COM ARTS 760 - ADVANCES IN COMMUNICATION THEORIES
3 credits.
In-depth review and evaluation of behavioral and social scientific theories of human communication. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
COM ARTS 799 - INDEPENDENT STUDY
1-3 credits.
Devised by a staff member in collaboration with students. Enroll Info: None
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

## COM ARTS/HDFS 817 - COUPLE RELATIONSHIPS: THEORY, RESEARCH, AND APPLICATION <br> 3 credits.

This course will review current research on the nature, dynamics, and developmental course of couple relationships and explore the implications of this scientific knowledge for prevention/intervention programs and policy. Contemporary theories and empirical research will be examined. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
COM ARTS/JOURN/LSC 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. Enroll Info: None
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. Enroll Info: Grad st in com 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: Fall 2020

## 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.
Enroll Info: Grad st in com 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: Fall 2020

COM ARTS 904 - COMMUNICATION SCIENCE COLLOQUIUM
1 credit.
Social scientific approaches to the study of interpersonal communication and media effects. Enroll Info: Grad st in com 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: Fall 2020

## COM ARTS 905 - RHETORIC COLLOQUIUM

1-3 credits.
Advanced research in rhetorical theory and criticism, and in the history of public address. Enroll Info: Grad st in com arts with major emphasis in rhetoric, or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
COM ARTS 940 - SEMINAR: MEDIA, CULTURE, AND THE PUBLIC SPHERE
2-3 credits.
Analysis and critique of public sphere theories of the media, pre- and post-Habermas, including concepts of citizenship and nation, media and democracy, globalization and cultural hierarchies. Implications for media policy and structures. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
COM ARTS 950 - SEMINAR-RADIO TELEVISION FILM
2-3 credits.
Enroll Info: None
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
COM ARTS 955 - MEDIA HISTORY AND HISTORIOGRAPHY
3 credits.
A seminar on post-structuralist historical theory, historiographical methods, and issues in historiography for students of media history. Introduction to archival research. Enroll Info: None
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.
Enroll Info: None
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

## COM ARTS 966 - SEMINAR-MODERN RHETORICAL THEORY

 2-3 credits.Enroll Info: Grad st; COM ARTS 570 or cons inst
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
Enroll Info: None
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

COM ARTS 969 - SEMINAR: CONTEMPORARY RHETORICAL THEORY 2-3 credits

Enroll Info: None
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
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. Topic varies with instructor. Enroll Info: None
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
COM ARTS 976 - SEMINAR IN RHETORICAL CRITICISM
2-3 credits.
Enroll Info: None
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
COM ARTS 990 - RESEARCH AND THESIS
1-9 credits.
Independent research and writing under the supervision of a staff member. Enroll Info: None
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

## 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. Enroll Info: None
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 2020
CS\&D 201 - SPEECH SCIENCE
3 credits.
Anatomy and physiology of the speech production mechanism; acoustic characteristics of the speech signal. Enroll Info: None
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 2020
CS\&D 202 - NORMAL ASPECTS OF HEARING
3 credits.
Provides students with background in the physical acoustics of sound, the anatomy and physiology of the auditory system, and the psychology related to hearing, known as psychoacoustics. Enroll Info: None
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 2020
CS\&D 210 - NEURAL BASIS OF COMMUNICATION
3 credits.
Considers the neural basis for communicative behaviors. Provides understanding of the anatomy, physiology, and physiopathy of the central and peripheral nervous systems as they relate to normal and disordered communication. Enroll Info: Sophomore standing or consent of instructor 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: Summer 2020

## CS\&D 240 - LANGUAGE DEVELOPMENT IN CHILDREN AND ADOLESCENTS <br> 3 credits.

This course covers communication and language development from infancy to adulthood. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: CS\&D 201 and 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 2020
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 Enroll Info: None
Requisites: CS\&D 201, 240
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
CS\&D 318 - VOICE, CRANIOFACIAL AND FLUENCY DISORDERS
3 credits.
The material in this course will provide a basis for understanding the communication problems of individuals with voice disorders, orofacial anomalies, and fluency disorders. Enroll Info: None
Requisites: CS\&D 201, 202, and 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 2020

## CS\&D 320 - INTRODUCTION TO AUDIOLOGY

3 credits.
Hearing science, disorders and evaluation, conservation, and aural rehabilitation. Enroll Info: None
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 2020

CS\&D 371 - PRE-CLINICAL OBSERVATION OF CHILDREN AND ADULTS 3 credits.

This writing-intensive course is the first course in the clinical education sequence. It 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. (WI). Enroll Info: None
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 2020
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. Class will emphasize words and sign skill for clinic/schools. Enroll Info: None
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 2020
CS\&D 425 - AUDITORY REHABILITATION
3 credits.
Topics include scope of practice, current approaches to perception, production and conversational fluency development as they apply in auditory rehabilitation treatment in home, school, work and social settings. Enroll Info: None
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 2020

## CS\&D 440 - CHILD LANGUAGE DISORDERS, ASSESSMENT AND

 INTERVENTION3 credits.
Language differences and disorders in various populations are covered, as well as means of assessment and intervention. Enroll Info: None
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 2020
CS\&D 455 - TOPICS IN COMMUNICATIVE DISORDERS
1-3 credits.
Lecture-discussion with or without laboratory component on current topics in normal aspects of communication or identification, treatment and research in speech-language pathology and audiology. Enroll Info:
None
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 2013

## 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. Enroll Info: Admission to (or eligibility for) the Honors Program in Communication Sciences and Disorders
Requisites: Declared in 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 2020
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. Enroll Info: Grad st in com dis or undergrad biol major with neurobiol option, or cons inst
Requisites: Graduate standing in Communication Sciences and Disorders or junior standing declared in Biology major with Neurobiology option
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 2020

## CS\&D 681 - SENIOR HONORS THESIS

3 credits.
Enroll Info: Sr st cons of dept hnrs adv
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
CS\&D 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Sr st cons of dept hnrs adv
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

## CS\&D 698 - DIRECTED STUDY

1-6 credits.
$\mathrm{Cr} / \mathrm{N}$. Enroll Info: Jr or Sr st. Graded on a Cr/N basis; requires cons inst
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
CS\&D 699 - DIRECTED STUDY
1-6 credits.
Program of reading devised by a staff member in collaboration with the student. Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020
CS\&D 702 - RESEARCH METHODS IN COMMUNICATION SCIENCES AND DISORDERS
3 credits.
This course will introduce learners to research methods in communication sciences and disorders with the goal of producing 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. Enroll Info: Enrollment in the clin speech-lang pathology masters program or consent of instructor
Requisites: Graduate/professional standing
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. Enroll Info: Com Dis 440 or cons inst
Requisites: Graduate standing or declared in Doctor of Pharmacy professional program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Com Dis 503
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020

## CS\&D 705 - MOTOR SPEECH DISORDERS/AUGMENTATIVE AND ALTERNATIVE COMMUNICATION <br> 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. Enroll Info: None Requisites: CS\&D 503 and CS\&D 703
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CS\&D 706 - MANAGEMENT AND ASSESSMENT OF VOICE DISORDERS
3 credits.
Techniques applicable to children and adults with disorders of voice, both functional and organic in origin. Lecture plus lab or observation. Enroll Info: Com Dis 318 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: 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
CS\&D 708 - FLUENCY AND PHONOLOGICAL DISORDERS
3 credits.
An advanced course concerning the etiology, definition, diagnosis, and management of fluency and phonological disorders in children and adults. Enroll Info: 2nd yr st in masters progm in speech-lang pathology Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CS\&D 709 - LANGUAGE DEVELOPMENT AND DISORDERS IN SCHOOL AGE POPULATIONS: SCHOOL METHODS AND PROCEDURES

3 credits.
This course will review 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. The course addresses UWMadison Teacher Education Standards; WI Rules and Statutes, Teaching Standards stipulated in PI 34. Enroll Info: None
Requisites: CS\&D 703
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CS\&D 712 - INTRODUCTION TO CLINICAL METHODS

1 credit.
This is the first clinical methods course for entering speech-language pathology graduate students. The course provides learning opportunities to increase students' knowledge and skills related to assessment and intervention of persons with communication disorders. It is a forum for discussion, reflection and practicing clinical skills. Enroll Info: None Requisites: Graduate/professional standing
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.

The course content focuses on methods for participating in medical site speech pathology including professionalism, documentation, insurance, ethics, and counseling. Enroll Info: Com Dis 503, 702, 707, 708, and 790
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CS\&D 714 - SCHOOL METHODS AND PROCEDURES IN SPEECHLANGUAGE PATHOLOGY
1 credit.
The course content focuses on evidence-based practices, assessment and evaluation frameworks, and clinical methods related to school services in speech-language pathology. Enroll Info: Com Dis 503, 702, 707,708 , and 790
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

CS\&D 752 - CAPSTONE IN COMMUNICATION SCIENCES AND DISORDERS: INTEGRATION OF CLINICAL AND RESEARCH METHODS 3 credits.

Designed to ensure students (1) can use scientific principles in their daily lives and clinical practice; (2) can evaluate scientific evidence as disseminated through multiple channels for use in research and clinical practice; (3) can understand and apply parallel modes of thinking in clinical practice and research. Enroll Info: None
Requisites: CS\&D 705, 706, 707, 708, 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Register for only 1 cr ; Clinical Director authorizes any additional cr; sites on/off campus. Enroll Info: None
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
CS\&D 799 - INDEPENDENT STUDY
1-6 credits.
See description for Com Dis 999. Enroll Info: None
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
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.). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: Grad st cons inst, Com Dis 850, 851, 852, 858
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Grad st, Com Dis 801,802, 821
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## CS\&D 834 - COUNSELING IN AUDIOLOGY

2 credits.
Enroll Info: Grad st, Com Dis 821, 823, 832
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Students encouraged to pursue research interests. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 854
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CS\&D 836 - PEDIATRIC HABILITATION/REHABILITATION

 3 credits.Study of the principles and techniques of intervention with hearing impaired children, including the selection and fitting of amplification, the effect of hearing impairment on speech perception, production, and language, communication and educational options, and the re/ habilitation of communication skills. Enroll Info: Grad st, cons inst, Com Dis $850,851,852,856,832,863$
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CS\&D 837 - AUDITORY AND VESTIBULAR PATHOLOGIES I

2 credits.
Survey of the most common peripheral auditory system pathologies and their presentation in the auditory evaluation. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 856, 858
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## CS\&D 845 - THE HUMAN BALANCE SYSTEM: STRUCTURE, ASSESSMENT, AND REHABILITATION <br> 2 credits.

Study of human balance function with ennphasis 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. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 860, 862
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CS\&D 846 - THE HUMAN BALANCE SYSTEM: LABORATORY
1 credit.
The focus will be on training the student to perform and analyze the results of electronystagmography (ENG) and videonystagmography (VNG) examinations, and practice the canalith repositioning maneuver. If possible, students will observe the administration of rotational and posturography tests. Enroll Info: Grad st, cons inst, Com Dis 850,851, 852, 860,862 , con reg in 845
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. The course emphasizes both the diagnostic and rehabilitative challenges in working with elderly patients. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 856, 862
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Grad st cons inst, Com Dis 202, 320
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CS\&D 852 - HEARING ASSESSMENT
2 credits.
Familiarizes students with the 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. Enroll Info: Grad st con reg in Com Dis 853
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CS\&D 853 - HEARING ASSESSMENT LABORATORY

1 credit.
Familiarize students with the 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. Enroll Info: Con reg in Com Dis 852
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Grad st, cons inst con reg in Com Dis 855
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Grad st, con reg in Com Dis 854
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 853, 891, con reg in Com Dis 857
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 atechniques, and using appropriate strategies in fitting. Electroacoustic evaluation and use of probe microphone measures in hearing aid fitting. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 853, con reg in 856
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CS\&D 858 - PHYSIOLOGICAL ASSESSMENT IN AUDIOLOGY I

2 credits.
Study of concepts and procedures 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. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, con reg in 859
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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, wih the major emphasis on otoacoustic emissions and the auditory brainstem response. Enroll Info: Grad st, cons inst, con reg in Com Dis 858 Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 P300, and MMN. Course includes an introduction to evaluation of the balance system. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 853, 858, 859, con reg in 861
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CS\&D 861 - LABORATORY IN PHYSIOLOGICAL ASSESSMENT OF THE AUDITORY SYSTEM II
1 credit.

Laboratory experience in objective measures used by audiologists for threshold and diagnostic evaluations, including acoustic immittance, middle and long latency auditory evoked potentials, P300, and MMN.
Demonstrations, projects, and case studies prepare students to administer and interpret these tests. Enroll Info: Grad st, cons inst, Com Dis $850,851,852,853$, con reg in 860
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 858, 837
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CS\&D 863 - IMPLANTABLE AUDITORY PROSTHESES

2 credits.
The audiological management of severe to profound hearing loss using implantable auditory prostheses. This course will focus on cochlear implants, and will also provide an introduction to the auditory brainstem implant. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 832, 856
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: Grad st, cons inst, Com Dis 850, 851, 852, 854, 856
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CS\&D 867 - SCHOOL METHODS FOR AUDIOLOGISTS

1 credit.
Designed to fulfill Wisconsin's Department of Public Instruction (DPI) licensing requirements for audiologists. This course will help students apply their knowledge and skills in assessment and intervention of hearing related disorders to the public school setting. Enroll Info: Au.D. student or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CS\&D 891 - CLERKSHIP IN AUDIOLOGY I

1-3 credits.
An introductory, first year, practicum 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. Enroll Info: None
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

## CS\&D 892 - CLERKSHIP IN AUDIOLOGY II

1-3 credits.
This second year clerkship focuses on the physiologic assessment of the vestibular and the peripheral and central auditory systems. It also provides continued development of skills in the assessment of hearing and the implementation of treatment plans across all ages. Enroll Info: Com Dis 891
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

CS\&D 893 - CLERKSHIP IN AUDIOLOGY III
1-4 credits.
This third year clerkship provides opportunities to practice skills in settings outside of the university clinics. The goal is to advance all skills to the developing level so that the student can perform assessments and treatment with less supervision. Enroll Info: Com Dis 892
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

## CS\&D 894 - EXTERNSHIP IN AUDIOLOGY

2-4 credits.
The externship year continues development of skills in assessment of hearing and implementation of treatment plans across all ages. The goal is to develop skills to the mastery level where the student can perform competently with a minimum of supervision. Enroll Info: Com Dis 893
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
CS\&D 899 - CAPSTONE STUDY IN AUDIOLOGY
1-3 credits.
Independent work on a capstone project under the supervision of a faculty member. Enroll Info: None
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

## CS\&D 900 - SEMINAR-SPEECH SCIENCE

2-3 credits.
Focus varies with staff. Various aspects of physiological and acoustic phonetics and of speech perception. Enroll Info: None
Requisites: 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

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. Enroll Info: None
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. Enroll Info: None
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

## CS\&D 990 - RESEARCH AND THESIS

1-12 credits.
Under the supervision of a staff member. Enroll Info: None
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

## CS\&D 999 - INDEPENDENT STUDIES

1-3 credits.

Creative project designed by the student and supervised by staff. Enroll Info: None
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

## 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 <br> 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 wihin a broader context of dynamic social and ecological relationships. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Satisfied Communications A requirement; not open to students who have taken SOC 181 or SOC/C\&E 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: Fall 2020
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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Not open to students who have taken SOC 181 or SOC/ C\&E 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: Fall 2020
C\&E SOC/GEN\&WS/SOC 215 - GENDER AND WORK IN RURAL AMERICA 3 credits.

Sociological dimensions of men's and women's work in nonmetropolitan areas of the United States. Examines gender divisions of "work" in its fullest sense: paid work in formal and informal economies, selfemployment, and nonmarket work such as housework. Enroll Info: None
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 2014
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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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.
Students are introduced to a wide range of work on technology, the social forces shaping its development, and social impacts of its adoption. Students are encouraged to examine their assumptions about technology and its relationship to society. Enroll Info: None
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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## C\&E SOC/HISTORY/POLI SCI/SOC 259 - FORWARD? THE WISCONSIN

 IDEA, PAST AND PRESENT1-3 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. Enroll Info: None
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

## C\&E SOC/AFROAMER/ANTHRO/GEOG/HISTORY/LACIS/POLI SCI/SOC/ SPANISH 260 - LATIN AMERICA: AN INTRODUCTION <br> 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. Enroll Info:

## None

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: Summer 2020

## C\&E SOC 289 - HONORS INDEPENDENT STUDY

1-2 credits.
Enroll Info: Enrolled in the CALS Honors Program Sophomore or Junior standing. INTER-AG 288
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.
Enroll Info: Open to Freshmen, Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: SOC/C\&E SOC 140, 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 2020

C\&E SOC/SOC 341 - LABOR IN GLOBAL FOOD SYSTEMS 3 credits.

Provides an 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. We will also learn about the ways that social movements are working to reshape commodity chains by promoting local production, fair trade, and labor justice.
Requisites: A C\&E SOC or SOC course
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 2020

## 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. Should be taken as early as possible by students considering a major in Sociology. Prior statistics not required. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Not open to students who have taken SOC 358
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
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; lectures and lab. Gateway to advanced courses in sociology. It is recommended that students take SOC/C\&E SOC 357 prior to taking this course. Enroll Info: Satisfied Quantitative Reasoning (QR) A requirement. Not open to students who have taken Soc 359
Requisites: Not open to students who have taken SOC 359
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: Fall 2020

C\&E SOC/SOC 361 - STATISTICS FOR SOCIOLOGISTS II 3 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 mulitcollinearity; associated diagnostics and corrections. Use of Stata and/or SAS for dataset creation and analysis. Lectures and lab. Enroll Info: Sophomore standing. Sophomore standing, and Soc/Community Environmental SOC/C\&E SOC 360 or equivalent Requisites: Sophomore standing and C\&E SOC 360, C\&E SOC 359, STAT 301, ECON 310, PSYCH 210, PSYCH 280, GEOG 360, POLI SCI 551, MATH/STAT 310, GEN BUS 303, OTM 300, or STAT 371
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 2020
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. Enroll Info: None
Requisites: C\&E SOC 360, PSYCH 210, PSYCH 280, GEN BUS 303,
STAT 301, ECON 310, MATH/STAT 310, GEOG 360, or POLI SCI 551
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
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. Enroll Info: None
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 2020

## C\&E SOC/POP HLTH/SOC 380 - CONTEMPORARY POPULATION PROBLEMS FOR HONORS

3 credits.
This course is designed to identify, examine the nature and evaluate the evidence regarding key population problems affecting modern societies in the developed and developing world. The course emphasizes the development of demographic models as a tool to frame, define and investigate these problems. Examples of problems studied include: relations between population growth and environment, population growth and socioeconomic development, population and emergence of new diseases. Enroll Info: None
Requisites: Honors, and Community \& Environmental SOC/C\&E SOC 360 or equivalent or 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
Honors - Honors Only Courses (H)

## Repeatable for Credit: No

Last Taught: Fall 2012
C\&E SOC 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION
1-8 credits.
Enroll Info: So, Jr or Sr st and cons supervising inst, advisor and internship program coordinator
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 2020

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. Enroll Info: Current enrollment in a UW-Madison 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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
C\&E SOC/ENVIR ST/GEOG 434 - PEOPLE, WILDLIFE AND LANDSCAPES 3 credits.

This course explores the relationship between humans and wildlife amidst diverse landscapes, both historic and contemporary, tropical and temperate. We study how humans shape wild animal populations by modifying physical environments, and by hunting, domesticating and introducing species. Enroll Info: Geog/ENVIR ST/GEOG 339
Requisites: None
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 Sustain - Sustainability
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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020

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. Students work in teams and may engage problems using service learning, community based research, and interdisciplinary approaches. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2013

## C\&E SOC/SOC 533 - PUBLIC HEALTH IN RURAL \& URBAN COMMUNITIES <br> 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020

## C\&E SOC/ENVIR ST/SOC 540 - SOCIOLOGY OF INTERNATIONAL

 DEVELOPMENT, ENVIRONMENT, AND SUSTAINABILITY3 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## C\&E SOC/SOC 541 - ENVIRONMENTAL STEWARDSHIP AND SOCIAL JUSTICE <br> 3 credits.

Application of sociological theory and analysis to environmental issues. Course examines the ways in which environmental stewardship and conflict are embedded within broader cultural, social, and political contexts. Enroll Info: None
Requisites: Any of these: Intro Soc course (SOC/C\&E SOC 140, 181, 210, or 211), Forest and Wildlife Ecol 248, ENVIR ST 112, ENVIR ST 113, GEOG/ ENVIR ST 139, GEOG/ENVIR ST 337, GEOG/ENVIR ST 339, GEOG 101
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2018

## C\&E SOC/AGRONOMY/MED HIST/PHILOS 565 - THE ETHICS OF MODERN BIOTECHNOLOGY

3-4 credits.
Study of ethical issues arising from the application of modern biotechnology to microorganisms, crops, and non-human animals. Readings cover moral theory, technology studies, political philosophy, the science used in biotechnology, and current regulations governing its use. Enroll Info: None
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: No
Last Taught: Fall 2020
C\&E SOC/SOC 573 - COMMUNITY ORGANIZATION AND CHANGE 3 credits.

Examines theories of community change and different models of community organizing. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2019

## 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/ C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020
C\&E SOC/SOC 623 - GENDER, SOCIETY, AND POLITICS
3 credits.
Examines the relationship between the social structures of gender (e.g., the domestic division of labor, sex-segregated occupational structures, gender ideologies, the social organization of sexuality) and political institutions, political activities, and state policies. Enroll Info: Junior standing. SOC/C\&E SOC 357 or a Gender Women's Studies course with a S, Y or Z breadth designation
Requisites: None
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 2014

## C\&E SOC/SOC 630 - SOCIOLOGY OF DEVELOPING SOCIETIES/THIRD WORLD <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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: Fall 2017
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020

C\&E SOC/SOC 655 - MICROFOUNDATIONS OF ECONOMIC SOCIOLOGY 3 credits.

A review and critique of economic theory from a sociological perspective. Reviews central concepts of contemporary microeconomics (e.g., rationality, exchange, strategic interaction, evolution, information), addressing critiques and alternatives offered by economic sociologists, economists, and other behavioral and social scientists. Enroll Info: Intro Soc (SOC/C\&E SOC 140, 181, 210, or 211), SOC/C\&E SOC 357, SOC/
C\&E SOC 360, Senior standing, and consent of instructor
Requisites: None
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 2014
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. Enroll Info: Intro Soc
course (SOC/C\&E SOC 140, 181, 210, or 211) and SOC/C\&E SOC 357
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
Last Taught: Spring 2017

## C\&E SOC 681 - SENIOR HONORS THESIS

2-4 credits.
Enroll Info: Honors program candidacy
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.
Continuation of 681. Enroll Info: Honors program candidacy Rur 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.
Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018

C\&E SOC 692 - SENIOR THESIS
2 credits.

## Enroll Info: None

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. Lectures, readings, and discussions of the art and practice of research and the writing of research reports. For undergraduate and graduate students participating in the department's Concentration in Analysis and Research. Enroll Info: SOC/C\&E SOC 357, SOC/C\&E SOC 360, SOC/C\&E SOC 361, and CAR internship. Open only to students currently enrolled in CAR
Requisites: None
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 2020
C\&E SOC 699 - SPECIAL PROBLEMS
1-4 credits.
Enroll Info: Sr st and cons inst
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 2020

## C\&E SOC/I SY E/N E/SOC 708 - SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS <br> 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. Enroll Info: None
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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## C\&E SOC/SOC 731 - INTERMEDIATE SOCIAL PSYCHOLOGY: GROUP

 AND COLLECTIVE PROCESSES3 credits.
Major social pychological theories and research that focus on interpersonal relations and group processes. Topics include: social interaction (influence, self-presentation, altruism, agression), groups (cohesion, conformity, leadership, problem-solving, decision making), intergroup relations (conflict, stereotypes), n-person games (dilemmas, coalition formation). Enroll Info: None
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 748 - ENVIRONMENTAL SOCIOLOGY

3 credits.
Interaction between societies and their environments. Includes human ecology, environmental attitudes and individual actions, the social organization of environmental protection and exploitation and the effects of science, technology, and development. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
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; lectures and lab. Enroll Info: Grad st, SOC/C\&E SOC 357 and 362 or equiv
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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.
Enroll Info: None
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

C\&E SOC/GEN\&WS/SOC 904 - SOCIOLOGICAL PERSPECTIVES ON GENDER
3 credits.

Advanced topics in the analysis of gender relations in society. Enroll Info: None
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

C\&E SOC/SOC 913 - SEMINAR-SOCIAL CHANGE
3 credits.

Enroll Info: None
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. Enroll Info: SOC 134 or 646 cons inst
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

C\&E SOC/SOC 923 - SEMINAR-SOCIAL STRATIFICATION
3 credits
Enroll Info: None
Requisites: 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/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. Enroll Info: None
Requisites: 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
C\&E SOC/SOC 929 - SEMINAR: CLASS ANALYSIS AND HISTORICAL
CHANGE
3 credits.

Selected topics in Marxist theory and research. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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 945 - SEMINAR-RURAL SOCIOLOGY
3 credits.

Theory and research in alternate semesters in rural aspects of population, stratification, social change, and groups and institutions. Enroll Info:
None
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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None
Requisites: 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 961 - SEMINAR-ADVANCED SOCIAL PSYCHOLOGY 3 credits.

A selected research or theoretical area. Topic varies. Enroll Info: None 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

C\&E SOC/SOC 965 - SEMINAR-RECENT DEVELOPMENTS IN SOCIAL PSYCHOLOGY
3 credits.
Current literature, emphasis on recent journal articles. Enroll Info: None
Requisites: 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.
Content varies. Enroll Info: None
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

C\&E SOC/SOC 972 - SEMINAR IN POPULATION AND DEVELOPMENT 3 credits.

Conceptual tools of sociology and demography will be used to examine current issues in population and development. The course readings will 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. We will focus on the impact of international population priorities on the current relationship between population and development, with particular attention to gender, poverty, and health. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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 LATINAMERICAN AREA
1-3 credits.
Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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
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 by faculty, graduate students, and visiting scholars. Enroll Info: None
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

## 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 their own work by faculty, graduate students, and visiting scholars. Enroll Info: None
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
C\&E SOC 990 - RESEARCH
1-12 credits.
Enroll Info: None
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

## C\&E SOC/SOC 993 - RESEARCH: SOCIOLOGY OF ECONOMIC CHANGE trainees <br> 1-3 credits.

Presentations of research in progress concerning social and economic change in developing countries. Enroll Info: None
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

C\&E SOC/SOC 995 - RESEARCH: METHODOLOGY TRAINEES 1-3 credits.

Enroll Info: Method trainee or cons inst
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
C\&E SOC/SOC 997 - RESEARCH: DEMOGRAPHY AND ECOLOGY
trainees
1-3 credits.
Enroll Info: Demography ecology trainee or cons inst
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

## C\&E SOC 999 - READING AND RESEARCH

1-3 credits
Enroll Info: None
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

## COMPARATIVE BIOSCIENCES (COMP <br> BIO)

## COMP BIO 500 - FUNDAMENTAL PRINCIPLES OF VETERINARY ANATOMY <br> 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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

COMP BIO 501 - VETERINARY HISTOLOGY
5 credits.
Comparative structural and functional aspects of cells and tissues will be examined. Mammalian histology will be stressed. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
COMP BIO 502 - MOLECULAR AND METABOLIC BASIS OF MEDICINE 3 credits.

This course covers metabolism with a more advanced incorporation of concepts of chemistry, cell biology and physiology. Clinical correlations in veterinary medicine are also covered. Enroll Info: Vet Med st and BIOCHEM 501 or equiv, or cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020
COMP BIO 503 - VETERINARY DEVELOPMENTAL ANATOMY
2 credits.
Principles of development and organogeneses in domestic animals. Normal developmental patterns are related to adult anatomy. Clinical implications of common congenital defects are discussed. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020

## COMP BIO 505 - VETERINARY NEUROANATOMY AND NEUROPHYSIOLOGY <br> 3 credits.

A comparative approach to the morphological and physiological properties of the central nervous system of animals, particularly those of veterinary importance. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## COMP BIO 506 - VETERINARY PHYSIOLOGY B

4 credits.
The second semester of a two semester comprehensive course in comparative veterinary physiology covering digestive, endocrine, and reproductive systems. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020

## COMP BIO 551 - VETERINARY PHYSIOLOGY A

4 credits.
The first semester of a two semester comprehensive course in comparative veterinary physiology covering electrophysiology, and muscle, cardiovascular, respiratory, renal and acid-base physiology. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info:

## None

Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Comp Bio 552 or cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020

## COMP BIO 675 - SPECIAL TOPICS

1-5 credits.
Enroll Info: Requisite varies by topic
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2019

## 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. Enroll Info: None
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 2020
COMP BIO 775 - EXTERNSHIP
1-24 credits.
This course is an elective for fourth year veterinary medical students which offers faculty coordinated experience in the veterinary medical profession outside the School. Enroll Info: Vet Med st or cons inst
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
COMP BIO 990 - RESEARCH
1-12 credits.
Research. Enroll Info: None
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

## 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. Enroll Info: Open to Fr; not open to stdts who have taken Comp Lit 287
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 2020

## 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 crosscultural literary relations and including emergent literatures. Enroll Info: Open to Fr; not open to stdts who have taken Comp Lit 288
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 2020

## COMP LIT 203 - INTRODUCTION TO CROSS-CULTURAL LITERARY FORMS <br> 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). Enroll Info: This crse is non-repeatable for comp lit majors. Open to Fr 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 2020

## COMP LIT 205 - INTRO TO COMPARATIVE STUDY OF RACE \& ETHNICITY, IN \& BEYOND THE U.S.

3 credits.
Comparative analysis of the modern categories of race and ethnicity as they have developed and are understood and practiced in diverse locations; course readings will include literary and non-literary texts and a $25 \%-50 \%$ focus on race and ethnicity in the U.S. Enroll Info: Satisfaction of or exemption from Comm A requirement. Open to Fr
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 2017

## COMP LIT 310 - INTRODUCTION TO LITERARY CRITICISM

$3-4$ credits.
Critical methodologies of comparative literature. General theories of literature and distinct approaches to literary texts. Required for the major. Enroll Info: So st and 6 cr of intro lit or con reg. Lecture only: 3 cr ; lecture and disc: 4 cr
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: Fall 2017

## COMP LIT 350 - PROBLEMS IN COMPARATIVE LITERATURES AND CULTURES <br> 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. Enroll Info: Jr st or completion of 2 sem of lit
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 2020

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.
Enroll Info: Jr st or completion of 2 semesters of lit. Lecture only: 3 cr ; lecture and disc: 4 cr
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: Spring 2020

## COMP LIT 368 - LITERATURE AND IDEAS

3-4 credits.
Historical, analytical and theoretical study of the impact and relevance of seminal concepts and ideas. Enroll Info: Jr st or completion of 2 sem of lit. Lecture only: 3 cr ; lecture and disc: 4 cr
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 2013

## 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. Enroll Info: Jr st or completion of 2 sem of lit

## 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 2018

## COMP LIT 371 - LITERARY CRITICISM

3-4 credits.
Introduction to the basic trends and schools of literary criticism; indepth study of representative critics from past centuries and from major contemporary schools. Enroll Info: Six cr of literature or cons inst. Lecture only: 3 cr ; lecture and disc: 4 cr
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 2018
COMP LIT 466 - LITERATURE , MEDIA, THE ARTS
$3-4$ credits.
Comparative critical study of the theoretical and practical interactions of literature with the arts (music, fine art, plastic arts); with visual, material, or digital cultures; with the media - with attention to cross-cultural, transnational and historical perspectives. Enroll Info: Jr st or completion of 2 sem of lit. Lecture only: 3 cr ; lecture and disc: 4 cr
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: Spring 2020
COMP LIT 473 - THEMATICS
3-4 credits.
Comparative study of the creation and perpetuation of themes and motifs in different cultural contexts, and the problems of their analysis and interpretation in specific literary (and other) works. Enroll Info: Jr st or completion of 2 sem of lit. Lecture only: 3 cr ; lecture and disc: 4 cr
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 2011

## 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. Enroll Info: Six cr of lit or cons inst. Lecture only: 3 cr ; lecture and disc: 4 cr
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: Spring 2020

## COMP LIT 500 - THE COMPARATIVE IN AND BEYOND COMPARATIVE LITERATURE <br> 3 credits.

A bridge course on a wide range of comparative topics - literary, cultural, philosophical, historical, legal - between the Department of Comparative Literature and the departments of our affiliate faculty members. Open to advanced undergraduate and graduate students. Enroll Info: None
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 2020
COMP LIT 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Permission of dept honors 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 2010
COMP LIT 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Completion of 681 or consent of department honors 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 2012
COMP LIT 690 - PROSEMINAR
3 credits.
Enroll Info: None
Requisites: None
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

## COMP LIT 691 - SENIOR THESIS

2-3 credits
Enroll Info: Senior standing, consult Undergrad 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: Fall 2015
COMP LIT 692 - SENIOR THESIS
3 credits.
Enroll Info: Senior standing, consent of Undergrad 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 2016

## COMP LIT 698 - DIRECTED STUDY

1-6 credits.

Enroll Info: Graded on a Cr/N basis; requires permission of dept chairman 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
COMP LIT 699 - DIRECTED STUDY
1-6 credits
Enroll Info: None
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 LIT 702 - PROBLEMS IN COMPARATIVE STUDIES

3 credits.
Comparative methods and the range of the discipline exposed through consideration of a variety of possible approaches. Enroll Info: None
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

## COMP LIT 731 - TEACHING IN THE DISCIPLINE

1 credit.
Seminar and practicum for teaching assistants in comparative literature and other graduate students in humanities interested in learning about comparative methodology and pedagogy. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## COMP LIT 750 - PROBLEMS IN COMPARATIVE LITERATURES AND CULTURES <br> 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. Enroll Info: None
Requisites: 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

## COMP LIT 770 - COMPARATIVE PROBLEMS IN PERIODS AND MOVEMENTS

3 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. Enroll Info: None

Requisites: 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
COMP LIT 771 - LITERARY CRITICISM
3 credits.
History, theory, and practice. Enroll Info: None
Requisites: 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
COMP LIT 775 - LITERATURE AND RELATED DISCIPLINES
3 credits.
Attempts to answer the question: What can the methods and discoveries of other disciplines contribute to the study of literature? Enroll Info: None Requisites: 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

COMP LIT 822 - SEMINAR-TRANSLATION
3 credits.
The theory and practice of translation. Enroll Info: None
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

## COMP LIT 958 - SEMINAR: PROBLEMS IN TRANSNATIONAL GENRE <br> AND MODE

3 credits.
Comparative study of the nature and substance of genre distinctions; of the relations between genre and mode in diverse literatures; of the critical analysis of texts in the context of literary distinctions of genre and mode with attention to cross-cultural, transnational and historical perspectives. Enroll Info: None
Requisites: 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

COMP LIT 966 - SEMINAR-LITERATURE, MEDIA, THE ARTS 3 credits.

Comparative critical study of the theoretical and practical interactions of literature with the arts (music, fine art, plastic arts); with visual, material, or digital cultures; with the media - with attention to cross-cultural, transnational and historical perspectives. Enroll Info: None
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

COMP LIT 975 - SEMINAR-POETICS AND LITERARY THEORY
3 credits.
Systematics, theoretics, and mechanics of literary form. Enroll Info: None Requisites: 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
COMP LIT 976 - SEMINAR IN POETICS (POLYSEMINAR)
1 credit.
Systematics, theoretics, and mechanics of literary and cultural forms. Enroll Info: None
Requisites: 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
COMP LIT 990 - RESEARCH AND THESIS
1-12 credits.
Consult department chairperson. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COMP LIT 999 - INDEPENDENT WORK

1-3 credits.
Consult department chairperson. Enroll Info: None
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

## COMPUTER SCIENCES (COMP SCI)

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. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR) A requirement 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: Fall 2020
COMP SCI 202 - INTRODUCTION TO COMPUTATION
3 credits.
An introduction to the principles that form the foundation of computer science. Suitable for students with a general background who wish to study the key principles of computer science rather than just computer programming. Enroll Info: None
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 367
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: Fall 2018

## COMP SCI 220 - DATA 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. Recommended for Data Science majors and other majors. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## COMP SCI 250 - DIGITAL SOCIETY: THE IMPACT OF COMPUTERS AND COMPUTER TECHNOLOGY

3 credits.
Introduction to computers in the digital society; social changes they influence, and choices they present. Topics include: digital divide, role of computers in improving quality of life, electronic voting and governance, digital intellectual property rights, privacy, computers and the environment. Enroll Info: None
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 2011
COMP SCI/E C E 252 - INTRODUCTION TO COMPUTER ENGINEERING 2 credits.

Logic components built with transistors, rudimentary Boolean algebra, basic combinational logic design, basic synchronous sequential logic design, basic computer organization and design, introductory machineand assembly-language programming. Enroll Info: None
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 2020

## 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 inclass activities. Meets with COMP SCI 570. Enroll Info: None
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. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: Satisfied QR-A requirement and (COMP SCI 200, 220, 302, 310, or 301) or (E C E/COMP SCI 252 and E C E 203); graduate/ professional standing; or declared in the Capstone Certificate in Computer Sciences. 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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020
COMP SCI 319 - DATA 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. Enroll Info: None
Requisites: Graduate/professional standing
Repeatable for Credit: No
Last Taught: Fall 2020

## COMP SCI 320 - DATA 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. Recommended for Data Science majors and other majors. Enroll Info: None
Requisites: COMP SCI 220 (or COMP SCI 301 prior to Spring 2020) or graduate/professional standing or declared in the Professional Capstone Program in Computer Sciences
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/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. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR) A requirement and EC 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: Fall 2020
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. Enroll Info: None
Requisites: EC 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: Fall 2020

## 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. Enroll Info: None
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 2020

## COMP SCI 369 - WEB PROGRAMMING

3 credits
Covers web application development end-to-end: languages and frameworks for client- and server-side programming, database access, and other topics. Involves hands-on programming assignments. Students attain a thorough understanding of and experience with writing web applications using tools popular in industry. Enroll Info: None
Requisites: (COMP SCI 300 or 367), graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals
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 2014
COMP SCI 400 - PROGRAMMING III
3 credits.
The third course in our programming fundamentals sequence. It presumes that students understand and use functional and objectoriented 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. Enroll Info: None
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: Fall 2020

## COMP SCI 402 - INTRODUCING COMPUTER SCIENCE TO K-12 STUDENTS <br> 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 $\mathrm{K}-12$ students learn computational thinking and computer programming. Enroll Info: None
Requisites: (COMP SCI 200, 202, 220, 300, 301, 302, 310 , 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 2020

## COMP SCI 407 - FOUNDATIONS OF MOBILE SYSTEMS AND APPLICATIONS <br> 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. Enroll Info: None
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: Spring 2020

## 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. Enroll Info: None
Requisites: MATH 222 and (MATH/COMP SCI 240 or MATH 234)
and (COMP SCI 200, 300, 301, 302, or 310) 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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Fall 2020
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). Enroll Info: None
Requisites: (STAT/MATH 310 and STAT 333) 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: Fall 2020

## COMP SCI/MATH/STAT 475 - INTRODUCTION TO COMBINATORICS

 3 credits.Problems of enumeration, distribution, and arrangement. Inclusionexclusion 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. Enroll Info: None
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: Fall 2020

## COMP SCI/CURRIC 502 - THEORY AND PRACTICE IN COMPUTER

 SCIENCE EDUCATION1 credit.
Computer science educational pedagogy and general teaching practices.
Practical experience gained through tutoring students. Knowledge of object-oriented programming required. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: (COMP SCI 367 or 400 ) and (COMP SCI 407, 536, 537, 545, $559,564,570,679$ or 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: Fall 2020

## 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. Enroll Info: None
Requisites: (MATH 340, 341, or 375) and (COMP SCI 200, 300, 301, 302 or 310) 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 2020

## 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. Enroll Info: None
Requisites: (MATH 320, 340, 341, or 375) and (MATH 322, 376, 421, or
521) and (COMP SCI 200, 220, 300, 310, or 301 prior to Spring 2020)
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 2020
COMP SCI/DS/I SY E 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". Enroll Info: None
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 2019

## 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 contextfree grammars and languages, and complexity-theoretic cryptography. Enroll Info: None
Requisites: (MATH/COMP SCI 240 or 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: Fall 2019

## COMP SCI/E C E/I SY 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. Enroll Info: None
Requisites: (COMP SCI 200, 220, 300, 301, 302, or 310) 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: Fall 2020
COMP SCI/I SY E/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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None Requisites: STAT/COMP SCI/I SY E/MATH 525 and (COMP SCI 200, 220, $300,301,302$, or 310 ) 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.

Introduction to machine learning that focuses on matrix methods and features real-world applications ranging 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. Enroll Info: None Requisites: (MATH 222 or 276) and (E C E 203, COMP SCI 200, 220, 300, $301,302,310$, or 320 ), or 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: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: EC 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: Fall 2020

## 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. Enroll Info: None
Requisites: 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: Fall 2020

## COMP SCI 538 - INTRODUCTION TO THE THEORY AND DESIGN OF PROGRAMMING LANGUAGES

3 credits.
Design and theory of programming languages: procedural, objectoriented, functional and logic paradigms. Serial and concurrent programming. Execution models and formal specification techniques. Enroll Info: None
Requisites: EC 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 2020

## 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 mapdeep 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. Enroll Info: None
Requisites: COMP SCI 200, 220, 300, 301, 302, or 310 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: Fall 2020
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. Enroll Info: None
Requisites: (COMP SCI 300 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: Fall 2020

## 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. Enroll Info: None
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
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. Enroll Info: None 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 547 - COMPUTER SYSTEMS MODELING FUNDAMENTALS 3 credits.

An introduction to basic tools and applications for modeling and analysis of computer systems. Fundamentals of network flow graphs, graph models of computation and stochastic models of computer system performance. Network delay analysis and capacity planning, reachability analysis for deadlock detection in distributed systems, Markov Chains, elementary queueing theory, basic concepts of queueing network models and associated analyses. Enroll Info: None
Requisites: MATH 234 and (COMP SCI 300 or 367) and E C E/
COMP SCI 354 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 2012

## 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. EC E 551 or knowledge of Verilog is recommended. Enroll Info: None
Requisites: (E C E/COMP SCI 352 and 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: Fall 2020

## 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. Enroll Info: None 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, multimedia and visualization. Fluency with vector mathematics (e.g., from MATH 234 or a linear algebra class) is recommended. Enroll Info: None 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: Fall 2020

## 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. Mathematical topics include Bayesian probability and statistics, random vectors, categorical random variables, entropy, mutual information, and source coding. Machine Learning topics include Bayes classification, Naive Bayes, generative modeling, decision trees and random forests, maximum likelihood estimation, principal component analysis, stochastic gradient methods, empirical risk minimization, entropy minimization, dimensionality reduction with random projections, and variational autoencoders. Previous exposure to numerical computing (e.g. Matlab, Python, Julia, R) required. Enroll Info: None

Requisites: (MATH 320, 340, 341, 375, or M E/COMP SCI/E C E 532 or concurrent enrollment) and (E C E 331, STAT/MATH 309, 431, STAT 311, $324, \mathrm{M}$ 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

## COMP SCI 564 - DATABASE MANAGEMENT SYSTEMS: DESIGN AND IMPLEMENTATION <br> 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. Enroll Info: None
Requisites: EC 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: Fall 2020
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. Enroll Info: None Requisites: (MATH 320 or 340) and (STAT 511, 541, POP HLTH/B M I 551, STAT 324, 371, or 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: Spring 2020

## 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 webbased, mobile,and embodied interfaces through month long group projects. Meets with COMP SCI 270. Enroll Info: None
Requisites: (COMP SCI 200, 202, 300, 301, or 302 ) or graduate/
professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals. Not open to students who have completed 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 2020

## COMP SCI/B M I 576 - INTRODUCTION TO BIOINFORMATICS

3 credits.
Algorithms for computational problems in molecular biology. The course will study algorithms for problems such as: genome sequencing and mapping, pairwise and multiple sequence alignment, modeling sequence classes and features, phylogenetic tree construction, and geneexpression data analysis. Enroll Info: None
Requisites: (COMP SCI 300 or 367 ) and MATH 222 or graduate/ professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals
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 2020

## 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 NPcomplete problems and ways to deal with them. Enroll Info: None Requisites: (MATH/COMP SCI 240 or 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: Fall 2020

## 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. Enroll Info: None 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 COMP SCI 559: Computer Graphics) or in 3D modeling (such as ART 429: 3D Digital Studio I or DS 242: Visual Communication II). Enroll Info: None
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 2020
COMP SCI/L IS 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: 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 2020
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. Enroll Info: None Requisites: 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: Summer 2020
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. Enroll Info: None
Requisites: 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 2020

## COMP SCI/I SY E 635 - TOOLS AND ENVIRONMENTS FOR OPTIMIZATION <br> 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. Enroll Info: None
Requisites: (MATH 320, 340, 341, or 375) and (COMP SCI 200, 202, 300,301 , or 302 ) 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
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. Enroll Info: None
Requisites: (COMP SCI 200, 202, 300, 301, 302, 310, or 367), 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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## COMP SCI 679 - COMPUTER GAME TECHNOLOGY

3 credits.

Survey of software technology important to computer games and other forms of interactive technology. Real-time image generation, managing complex geometric models, creating virtual characters, simulating physical phenomenon, networking technology for distributed virtual environments. Enroll Info: None
Requisites: COMP SCI 559 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: Fall 2012
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. Enroll Info: None

## 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 2020
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 Enroll Info: None
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 2020

## COMP SCI 691 - SENIOR THESIS

2-3 credits.
Individual study for seniors completing theses as arranged with a faculty member. Enroll Info: None
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 2020

## 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 Enroll Info: None
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

## COMP SCI 698 - DIRECTED STUDY

1-6 credits.
Directed study projects for juniors and seniors as arranged with a faculty member. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: 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

## 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. Enroll Info: 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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## COMP SCI/MATH 714 - METHODS OF COMPUTATIONAL MATHEMATICS I <br> 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. Enroll Info: 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 PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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, smoothedparticle hydrodynamics) for solving partial differential equations. Applications from science and engineering. Applications from science and engineering. Enroll Info: 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 PreMasters Mathematics (Visiting International) Program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 SYE 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 ) Enroll Info: None 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/MATH/STAT 726 - NONLINEAR OPTIMIZATION I

 3 credits.Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasiNewton 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. Enroll Info: 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: Fall 2020

## COMP SCI/I SYE 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). Enroll Info: None
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. Enroll Info: None
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/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. Enroll Info: None
Requisites: STAT/COMP SCI/I SY E/MATH 726
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## COMP SCI 733 - COMPUTATIONAL METHODS FOR LARGE SPARSE SYSTEMS <br> 3 credits.

Algorithms and theory for large scale systems in engineering and science, with emphasis on sparse matrices and iterative methods. Students are strongly encouraged to have knowledge of data structures (e.g., COMP SCI 367 or COMP SCI 300), numerical analysis (e.g., COMP SCI 412, E C E 334), and linear and matrix algebra (e.g., MATH 340). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
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, highlevel language systems, verifiability and proof techniques. Enroll Info: 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 2020

## 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. Enroll Info: None
Requisites: COMP SCI 736
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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) Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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) Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
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 encourage to have programming skills and to have taken a course in Digital System Fundamentals such as E C E/COMP SCI 352. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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). Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## COMP SCI/E C E/E M A/E P/M E 759 - HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Students are strongly encouraged to have knowledge of introductory artificial intelligence (e.g., COMP SCI 540). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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). Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 modelbased 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info:

## None

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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## COMP SCI/ED PSYCH/PSYCH 770 - HUMAN-COMPUTER INTERACTION

 3 credits.Principles of human-computer interaction $(\mathrm{HCl})$; human subjects research methods and procedures, qualitative and quantitative data analysis; and semester-long research project situated in critical domains of HCl , including applications in ubiquitous, affective, assistive, social, and embodied computing. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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, geneexpression data analysis, protein and RNA structure prediction, and whole-genome analysis and comparisons. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
COMP SCI 777 - COMPUTER ANIMATION
3 credits.

Survey of technical issues in the creation of moving and dynamic computer imagery. Principles of animation. Manual motion specification and keyframing. Procedural and simulation-based motion synthesis. Motion capture processing, editing and use. Animation systems. Modeling, rendering and video issues relating to animation. Image-based animation methods and warping. Applications of animation such as games and virtual environments. Basic introduction to artistic issues in animation, such as cinematography. Special effects for film and video. Students are strongly encouraged to have knowledge of computer graphics (e.g., COMP SCI 559) Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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) Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COMP SCI 790 - MASTER'S THESIS

1-9 credits.
Enroll Info: 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: Fall 2020
COMP SCI 799 - MASTER'S RESEARCH
1-9 credits

Enroll Info: None
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

## 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). Enroll Info: None
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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Spring 2020
COMP SCI/MATH 837 - TOPICS IN NUMERICAL ANALYSIS
3 credits.
Advanced topics in numerical analysis relevant to current research at UW. Each offering of the course will cover a topic selected by the instructor. Topics vary and may include fluid dynamics, computational methods, mathematical biology and others. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2011

## 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. Enroll Info: None
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

## COMP SCI 839 - CORE TOPICS IN COMPUTING

3 credits.
Topics selected from advanced areas. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COMP SCI/E C E/STAT 861 - THEORETICAL FOUNDATIONS OF

 MACHINE LEARNING3 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. Enroll Info: None
Requisites: 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 2020

## COMP SCI 880 - TOPICS IN THEORETICAL COMPUTER SCIENCE

3 credits.
Advanced topics in algorithms, complexity, and cryptography. The exact topic varies. Enroll Info: None
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
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. Enroll Info: None
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

COMP SCI 900 - ADVANCED SEMINAR IN COMPUTER SCIENCE $0-1$ credits.

Seminar on recent research on various aspects of computer science.
Enroll Info: None
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

## 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. Enroll Info: None
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

## COMP SCI 990 - DISSERTATION

1-6 credits.
Advanced level mentored reading and research for students with dissertator status. Enroll Info: None
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

COMP SCI 999 - DISSERTATOR RESEARCH
1-6 credits.
Advanced level mentored reading and research for dissertators. Enroll Info: None
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

## 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. Enroll Info: Freshman or Sophomore standing only Requisites: Freshman or sophomore standing only
Repeatable for Credit: No
Last Taught: Fall 2020

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 wellbeing. 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. Enroll Info: None

## 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 2020

## 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. Enroll Info: None
Requisites: STAT 301, 371, C\&E SOC 360, PSYCH 210, ECON 310,
GEN BUS 303, 306, or GEOG 360
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, for 2 number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CNSR SCI 299 - INDEPENDENT STUDY
1-3 credits.
Directed study projects for freshmen and sophomores as arranged with a faculty member. Enroll Info: None
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. Enroll Info: None
Requisites: CNSR SCI 201
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Junior standing. Not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Spring 2020
CNSR SCI 350 - MEDIATION: A MECHANISM FOR SERVING THE CONSUMER INTEREST
3 credits.
Will examine the area of dispute resolution for consumer complaints mediated by consumer affairs professionals. Discussion of how mediation empowers the consumer interest; consumer complaint behavior, and areas of dispute in industry and government will be integral parts of this course. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2011
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None 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 370 - COMPUTER APPLICATIONS IN RETAILING
3 credits.
Application of computer technology and analysis within the retailing environment. Topics include: merchandise inventory control and distribution, trend analysis and forecasting, electronic POS systems, credit authorization and control, store design and planning, and ethical issues. Enroll Info: None
Requisites: CNSR SCI 257
Repeatable for Credit: No
Last Taught: Fall 2011

## CNSR SCI 390 - FINANCIAL LIFE SKILLS: PEER EDUCATION TECHNIQUES <br> 2 credits.

Examine student learning and development to become effective peer educators in the Badger\$ense 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. Enroll Info: None
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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: None
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. Enroll Info: None
Requisites: ECON 101 or 111
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CNSR SCI 501 - SPECIAL TOPICS
1-3 credits.
Specialized subject matter of current interest to undergraduate students.
Prerequisites vary by topic. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2019
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. Enroll Info: None 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. Enroll Info: None
Requisites: Junior standing and CNSR SCI 657
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

CNSR SCI 560 - RETAIL PROMOTION
3 credits.
Developing store image through visual merchandising, advertising, sales, and other promotional activities. Enroll Info: None
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. Enroll Info: None
Requisites: CNSR SCI 657
Repeatable for Credit: No
Last Taught: Fall 2020
CNSR SCI 562 - THE GLOBAL CONSUMER
3 credits.
Key issues in international retailing with consideration of the global consumer. Enroll Info: None
Requisites: CNSR SCI 257
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (ACCT I S 100, ACCT I S 300, or GEN BUS 310) and

## CNSR SCI 257

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CNSR SCI 565 - SEMINAR IN CONSUMER SCIENCE
3 credits.
Analysis of the economic welfare of the family in a changing economy and current social policy issues. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

CNSR SCI 567 - PRODUCT DEVELOPMENT STRATEGIES IN RETAILING 3 credits.

Merchandise product development planning through market trend analysis, assortment planning sourcing production. Enroll Info: None Requisites: CNSR SCI 257
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info:

## None

Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

CNSR SCI 602 - FIELD EXPERIENCE IN RETAILING
1 credit.
Enables students with supervised field experiences to earn academic credit while engaged in a professional experience in retailing related fields. Course intended for sophomores in Retailing and Consumer Behavior. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Summer 2014

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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: CNSR SCI 275
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: CNSR SCI 275 or FINANCE/ECON 300
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Sophomore standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (ECON 101 or 111) and CNSR SCI 275
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: CNSR SCI 275 and 627
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020
CNSR SCI 748 - THE ECONOMIC ORGANIZATION OF THE HOUSEHOLD 3 credits.

Applies intermediate microeconomic theory to analyze household resource allocation decisions. Surveys current household economic decision theories and models. Life cycle analysis of goods and service consumption, intrahousehold paid work, household production and leisure time allocation, household decisions about fertility, marriage and divorce. A prior intermediate microeconomics course is recommended. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

CNSR SCI 888 - ADVANCED CONSUMER BEHAVIOR
3 credits.
The purpose of this class is to provide graduate students with a broadbased 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CNSR SCI 901 - GRADUATE SPECIAL TOPICS IN CONSUMER SCIENCE 1-3 credits.

Specialized subject matter of current interest to graduate students. Enroll Info: None
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

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. Enroll Info: None
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

CNSR SCI 960 - SEMINAR IN CONSUMER RESEARCH
1-3 credits.
The identification of concepts, frameworks and theories used in consumer research. An introduction to and critique of selected topical areas of consumer research. Enroll Info: None
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 2011
CNSR SCI 990 - RESEARCH AND THESIS
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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

## CNSR SCI 999 - INDEPENDENT STUDY

1-3 credits.
Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## COUNSELING PSYCHOLOGY (COUN <br> PSY)

## COUN PSY 105 - HUMAN RESOURCES DEVELOP. AWARENESS

 PROCESSES-CNSL\&GUID PERSPECTIVE1 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. Enroll Info:

## None

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2019

## COUN PSY 115 - HUMAN RESOURCES DEVELOPMENT: EDUCATIONAL

 EFFECTIVENESS1 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
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

## COUN PSY 125 - THE WISCONSIN EXPERIENCE SEMINAR <br> 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. Enroll Info: None
Requisites: First year 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 2020

## COUN PSY 225 - INTERSECTIONALITIES, SELF AWARENESS, AND

 SOCIAL ACTIONS FOR SOCIAL CHANGE3 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. Enroll Info: None
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 2020

## 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. Enroll Info: None

## 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: Summer 2020
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. Enroll Info: None
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 2020
COUN PSY 300 - SPECIAL TOPICS: COUNSELING AND COUNSELING PSYCHOLOGY
1-4 credits.
Examines various special topics in Counseling and Counseling Psychology. Enroll Info: 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: Fall 2020
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. Enroll Info: None
Requisites: Sophomore standing
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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. Enroll Info: None

## 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 2020

## 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. Enroll Info: None
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 compassionbased meditation), and empirical literature pertaining to neuroscientific and clinical effects of mindfulness training and related interventions. Enroll Info: None
Requisites: PSYCH 202, KINES 150, RP SE 505, COUN PSY 237 or 531
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## COUN PSY/CHICLA 525 - DIMENSIONS OF LATIN@ MENTAL HEALTH SERVICES <br> 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. Enroll Info: None
Requisites: Junior standing or 6 credits of CHICLA
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

## COUN PSY 531 - PREVENTION AND INTERVENTION IN MENTAL HEALTH

 ACROSS THE LIFESPAN3 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. The focus will be on individual, family, and community health, with particular attention to socioeconomic, cultural, and social and structural mechanisms. Enroll Info: None

## Requisites: KINES 150

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 2020

## 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 academiccommunity 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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

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. Enroll Info: None
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: 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. Enroll Info: None
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: Fall 2020

## COUN PSY 665 - CAREER DEVELOPMENT THROUGHOUT THE LIFE SPAN <br> 3 credits.

We are all engaged with, and affected by, the world of work. Career development is a lifelong process that includes tasks and decisionmaking 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. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Spring 2020

## COUN PSY 699 - INDEPENDENT READING

1-3 credits.

## Enroll Info: None

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 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COUN PSY/ED PSYCH 723 - DEVELOPMENTAL PROCESSES ACROSS THE LIFE SPAN <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COUN PSY/ED PSYCH/HDFS 726 - ETHNIC AND RACIAL DIVERSITY IN

 SOCIAL DEVELOPMENT3 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## COUN PSY/ED PSYCH/RP \& SE 737 - SEMINAR IN HISTORY AND

 SYSTEMS OF PSYCHOLOGY3 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None 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 2020
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. Enroll Info: None Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: ED PSYCH 761
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: RP \& 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: Summer 2020
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. Enroll Info: None
Requisites: RP \& 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 2020

## COUN PSY 791 - FOUNDATIONS OF CLINICAL MENTAL HEALTH COUNSELING <br> 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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COUN PSY 801 - ASSESSMENT AND TESTING IN MENTAL HEALTH COUNSELING <br> 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.
Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

COUN PSY 803 - GUIDANCE PROGRAM PLANNING AND MANAGEMENT 3 credits.

Consultation and guidance program planning and management from an institutional perspective. Special emphasis given to students at risk and legal and ethical aspects of counseling in K-12 settings. Enroll Info: None Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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.. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
COUN PSY 807 - SUPERVISED PRACTICUM IN COUNSELING II
2-5 credits.
Continuation of 806. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

COUN PSY 808 - SUPERVISED INTERNSHIP IN COUNSELING 2-5 credits.

Supervision of Master's internship counseling experience. Enroll Info: None
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
COUN PSY 810 - PROFESSIONAL DEVELOPMENT AND CLINICAL PRACTICE

## 1-6 credits.

Full-time involvement. Various assignments. Requires participation in a concurrent seminar. Enroll Info: None
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

## COUN PSY 825 - COUNSELING PSYCHOLOGY TECHNIQUES WITH <br> FAMILIES <br> 3 credits.

Approaches to counseling intervention for families across the life-cycle. Specific attention paid to family stress. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info:None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
COUN PSY 900 - COUNSELING PSYCHOLOGY PRACTICUM--

## FOUNDATIONAL

2-6 credits.
Foundational practicum and seminar in counseling psychology. Enroll Info: None
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: Fall 2020

## COUN PSY 901 - COUNS PSYCH PRACT: GROUP COUNSELING, CONSULTATION, COLLEGE TEACHING <br> 1-6 credits.

Supervised practice in group counseling, consultation, and/or college teaching with a focus on psychosocial development and human relations. Enroll Info: None
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 2020

## COUN PSY 902 - COUNSELING PSYCHOLOGY PRACTICUM IN SUPERVISION <br> 2-6 credits.

Practicum in supervising counselor trainees in laboratory and field settings. Enroll Info: None
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 2020
COUN PSY 903 - COUNSELING PSYCHOLOGY PRACTICUM--ADVANCED 3 credits.

Advanced practicum and topical seminar in counseling psychology. Enroll Info: None
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: Fall 2020

COUN PSY 904 - COUNSELING PSYCHOLOGY EXTERNSHIP
1-3 credits.
Advanced training in counseling psychology assessment, intervention, and/or supervision. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Fall 2020

## COUN PSY 908 - PRE-DOCTORAL INTERNSHIP IN HEALTH SERVICE PSYCHOLOGY PREPARATION SEMINAR <br> 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 decisionmaking process. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
COUN PSY/ED PSYCH/RP \& SE 944 - INTERNSHIP PREPARATION 1 credit.

Prepare for internship by providing resources, guidelines, and support in selecting and applying to internship sites. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: None
Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## COUN PSY 951 - COUNSELING PSYCHOLOGY RESEARCH IN INDIVIDUAL INTERVENTION <br> 2-3 credits.

Theory and research related to the counseling dyad. Enroll Info: None Requisites: COUN PSY 950
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
COUN PSY 954 - SEMINAR: TOPICAL RESEARCH IN COUNSELING

## PSYCHOLOGY

2-3 credits.
Special topics in counseling psychology. Enroll Info: None
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.

## Enroll Info: None

Requisites: Declared in Counseling Psychology or Counseling
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: COUN PSY 950
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
COUN PSY 990 - RESEARCH OR THESIS
1-12 credits.
Enroll Info: None
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

## COUN PSY/ED PSYCH/PSYCH/RP \& SE 995 - PREDOCTORAL INTERNSHIP <br> 0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship. Enroll Info: None
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
COUN PSY 999 - INDEPENDENT READING
1-3 credits.

## Enroll Info: None

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

## CURRICULUM AND INSTRUCTION (CURRIC)

CURRIC 209 - DIGITAL MEDIA AND LITERACY
3 credits.
This course is about 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. Over the course of semester we will explore theories of knowing and learning as they relate to digital media. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 240 - CRITICAL ASPECTS OF TEACHING, SCHOOLING, AND EDUCATION
3 credits.
This course investigates aspects of social justice and equity as they relate to teaching, schooling and education. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Adm to K-12 world lang educ progm; passing the oral proficiency exam in target lang; or cons inst
Requisites: None
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. Course goals include assisting future educators to think critically about these issues while preparing them to serve in culturally and socioeconomically diverse schools. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 277 - VIDEOGAMES \& LEARNING
3 credits.
Explores current research on videogames and learning. Students critically reflect on the intellectual and educational merits and drawbacks of videogames and how videogame culture shapes how individuals think and learn. Enroll Info: Sophomore standing
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: Fall 2020
CURRIC 290 - PRACTICUM IN SECONDARY SCIENCE EDUCATION 3 credits.

School-based experiences in science classes prior to student teaching. Attention given to planning, instruction, laboratory management and evaluation. Enroll Info: Adm to secondary science educ prgm
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

## 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. Enroll Info: None 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 2020
CURRIC 296 - PRACTICUM IN SECONDARY SCHOOL ENGLISH 3 credits.

Systematic observation and involvement in English instruction, grades 6-12. Enroll Info: Adm to secondary English educ prgm Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

CURRIC/MUSIC 300 - INTRODUCTION TO MUSIC EDUCATION 2 credits.

Introduction to the field of music education, including philosophy, history, and current practices and trends. Survey of music education in and out of schools as situated within diverse, pluralistic communities. Enroll Info: None
Requisites: MUSIC/CURRIC 303 or concurrent enrollment
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 2020
CURRIC/MUSIC 301 - MUSIC LEARNING AND TEACHING 1
2 credits.
The learning and teaching of music at the elementary and middle school levels. Enroll Info: None
Requisites: MUSIC/CURRIC 300 and concurrently enrolled in 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 2020
CURRIC/MUSIC 302 - MUSIC LEARNING AND TEACHING 2
2 credits.
The learning and teaching of music at the high school level. Enroll Info: None
Requisites: MUSIC/CURRIC 301 and 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 2020

## CURRIC/MUSIC 303 - FIELDWORK IN MUSIC COMMUNITIES

1 credit.
Fieldwork in music communities in the Madison area. Enroll Info: None
Requisites: 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. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
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. Enroll Info: Admission to the MC-EA Content Area Focused Elementary Education Program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 311 - LANGUAGE ACQUISITION AND USE IN AND OUT OF SCHOOLS, MIDDLE CHILDHOOD THROUGH EARLY ADOLESCENCE 3 credits.

Focuses on forms and features of English language, and language used in and out of schools. Students explore theories of second language acquisition, school-based language practices, and how to support language development for English learners. Enroll Info: Admission into the MC-EA program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 312 - ESL/BILINGUAL ISSUES
3 credits.
This course addresses social, cultural, and educational issues related to schooling for young English learners. It 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in the Elementary Education program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: CURRIC 314
Requisites: None
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC 316 - ESL/BILINGUAL METHODS

3 credits.
Designed to help students identify/develop methodological approaches and techniques that coordinate instructional practice with current theories on language and learning. Students will develop criteria for designing, implementing, and evaluating appropriate lessons and materials that integrate with classroom curricula and goals. Enroll Info: Admission to the Middle Childhood-Early Adolescence (MC-EA)/ESL Certification Program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Admission to the MIddle ChildhoodEarly Adolescence (MC-EA)/ESL Certification Program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 318 - TEACHING READING AND WRITING
3 credits.
Designed to provide elementary educators with 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. Enroll Info: None
Requisites: None
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 319 - PEDAGOGICAL CONTENT KNOWLEDGE FOR TEACHING ELEMENTARY MATHEMATICS 1
4 credits.
Gives pre-service teachers the opportunity to learn how to effectively teach core topics from the elementary school mathematics curriculum by deepening their understanding of these core elementary math topics and of pedagogical approaches that foster their students' understanding of these topics. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR)A requirement and classified as pre-Elementary or Elementary Education
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC 320 - PEDAGOGICAL CONTENT KNOWLEDGE FOR TEACHING ELEMENTARY MATHEMATICS 2 <br> 4 credits.

Gives pre-service teachers the opportunity to learn how to effectively teach core topics from the elementary school mathematics curriculum by deepening their understanding of these core elementary math topics and of pedagogical approaches that foster their students' understanding of these topics. Enroll Info: None
Requisites: CURRIC 319 and classified as pre-Elementary or Elementary Education.
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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

CURRIC/ART ED 322 - INFORMATION DESIGN FOR VISUAL LEARNING 3 credits.

Develop information design skills by building a foundation in art, design, and visual culture to create visual presentation tools using a wide variety of digital software and hardware as well as traditional media for instruction and learning. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2014

## CURRIC/ART ED 323 - ART IN ELEMENTARY EDUCATION

3 credits.

Basic principles and problems in teaching art; basis for an understanding and evaluation of children's art work. Enroll Info: None
Requisites: Declared in Art Education
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC/ART ED 324 - ART IN SECONDARY EDUCATION

3 credits.
Methods and philosophies of teaching art; problems in implementing theories in practical situations in junior and senior high schools. Enroll Info: None
Requisites: Declared in Art Education
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Acceptance to the EC-ESL Certification Program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 326 - LANGUAGE USE AND ACQUISITION IN EARLY CHILDHOOD 3 credits.

Students will 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. Enroll Info: Admission to the EC-ESL Certification Program

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 327 - METHODS OF TEACHING YOUNG ENGLISH LEARNERS 3 credits.

This course is designed to help students identify, develop and implement methodological approaches and techniques for teaching English learners that coordinate instructional practice with current theories on language and learning. Enroll Info: Admission to Early Childhood-ESL Certification Program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 328 - ARTS INTEGRATION FOR TEACHING AND LEARNING 3 credits.

Prepares prospective educators to integrate the arts into their teaching practices. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None 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 2019
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. Enroll Info:
Admission to Music Ed; con reg in CURRIC/MUSIC 337; or cons inst
Requisites: None
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. Enroll Info: None
Requisites: Declared in Music: Education and concurrent enrollment in 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: Fall 2020

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 use of dual/multiple languages by emergent bilinguals, relationships between first and additional languages, and supporting students to develop repertoires that include forms of language for school success. Enroll Info: Admission to the Middle Childhood- Early Adolescence (MC-EA)/ESL Certification Program
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Admission to the Middle Childhood-Early Adolescence (MC-EA)/ESL teacher certification program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 340 - ELEMENTARY EDUCATION PRACTICUM ONE 3 credits.

In this practicum and its corresponding seminar, students explore the various relationships among education, curriculum, and instruction across contexts of home, community and school. Practica sites are in preschools, neighborhood centers, and after-school sites serving children from diverse backgrounds. Enroll Info: Admission to the elem educ progm Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 342 - TEACHING WORLD LANGUAGES (K-8) 3 credits.

An undergraduate course in semester two or three of a four-semester certification sequence; success in first semester courses as well as 'Intermediate High' minimum oral proficiency level in the target language are required. Enroll Info: Adm to French, German or Spanish TC progm con reg in CURRIC 243; passing oral proficiency exam
Requisites: None
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. Enroll Info: Adm to world lang TC progm con reg in CURRIC 243; passing the oral proficiency exam in target lang; or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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/MUSIC 354 - TEACHING MUSIC
3 credits.
Development of musical skills and understandings. Ways of including music in the curriculum. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2013
CURRIC 357 - GAME DESIGN I
3 credits.
Explores the fundamentals of game design. Students develop fundamental skills in designing interactive systems (much as art students develop fundamental skills through courses in figure drawing or color theory). Intended for students who plan to continue on in careers in educational game design or in design fields in related settings, such as museums, theme parks, and technology-mediated classrooms. This is the first of a two course sequence. Enroll Info: None
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 2020
CURRIC 358 - PRACTICUM IN SOCIAL STUDIES IN THE SECONDARY SCHOOL
3 credits.
Enroll Info: Adm to secondary social studies educ progm

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## CURRIC 359 - TEACHING OF HISTORY AND THE OTHER SOCIAL STUDIES <br> 3 credits.

Enroll Info: Admission to intern program
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 361 - PRACTICUM IN MATHEMATICS IN THE SECONDARY SCHOOL
3 credits.
Observation and participation in high school and middle school mathematics classes. Students assume some responsibility for planning and instruction in a class. Enroll Info: Adm to secondary math educ progm
Requisites: Sed3 or Sed4 or Eds
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
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. Enroll Info: None
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 2020
CURRIC 363 - PRACTICUM IN EARLY CHILDHOOD EDUCATION IN KINDERGARTEN
1-3 credits.
For undergraduate preschool-kindergarten majors. Reserve two mornings, two afternoons, or one day for observation-participation in classrooms. Enroll Info: Cl 550 or con reg
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: EED
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC/RP \& SE 365 - TEACHING MATHEMATICS IN INCLUSIVE

## SETTINGS

4 credits.
Designed to introduce preservice teachers to a variety of approaches for teaching mathematics to students in inclusive schools. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC 366 - INTERNATIONALIZING EDUCATIONAL KNOWLEDGE

 3 credits.Internationalizing education means both education internationalizing our thinking and the ways we perceive the world, and internationalizing the field of curriculum and instruction. The course will introduce students to various educational systems around the world, focusing on similarities and dissimilarities in what is taught. The course discussions will center on curriculum across cultures, and its relation to political systems and religions to build an understanding of diversity in societies and schools. The topics will include 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. International and local speakers with multiple perspectives will be invited to explore issues of education as well as international opportunities for its study. Enroll Info: None
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
CURRIC 367 - ELEMENTARY TEACHING PRACTICUM II
3 credits.
Students will observe, supervise small groups, develop lesson plans for instruction, and teach a series of lessons in the related subject matter of reading, language arts, children's literature, and inclusive schooling. Enroll Info: EED; CURRIC 364

## Requisites: None

Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 368 - THE TEACHING OF READING
3 credits.
This course examines the psycholinguistics of reading; reading in social and cultural contexts in schools, families, communities, and workplaces; and the politics of reading. The course provides strategies for teaching all children to read. Enroll Info: None
Requisites: Declared in Elementary Education program
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 369 - THE TEACHING OF LANGUAGE ARTS
3 credits.
This course focuses on written and oral language development of children from infancy through early adolescence. It explores the cognitive, social, cultural, and political implications of literacy education. Enroll Info: None
Requisites: Declared in Elementary Education program
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 370 - TEACHING MATHEMATICS
3 credits.
Students in this course investigate the mathematics in the elementary school curriculum, how critical mathematics concepts and skills are learned, and how those concepts can be taught. Enroll Info: MATH 130, 131; EED (completion of previous sequence coursework) or SPE
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 371 - TEACHING SOCIAL STUDIES
3 credits.
This course examines recent trends in the field of social studies. Students are challenged to develop social studies curricula and instructional strategies that help prepare children for active citizenship in a democratic, multicultural, technological society. Enroll Info: EED and completion of previous sequence coursework
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 372 - TEACHING SCIENCE
3 credits.
Students will explore how children learn science, how to create classrooms where children learn to inquire, and how to assess children's learning. Students will conduct their own inquiries as the basis for considering these issues. Enroll Info: EED and completion of previous sequence coursework
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 373 - ELEMENTARY TEACHING PRACTICUM III 3 credits.

Students will 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. Enroll Info: EED; CURRIC 367, 368, 369, 422 Curric/RP \& SE/CURRIC 506
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 374 - GENERAL EDUC PRACTICUM \& INSTRUCTIONAL PLANNING FOR DIVERSE LEARNERS
2-5 credits.
In this practicum and seminar students develop lesson plans, design an integrated curriculum unit, and employ active and collaborative learning strategies in general education classrooms. Enroll Info: Adm to Spec
Educ TC Prog; Jr st con reg in CURRIC 305370
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 375 - PROSEMINAR
1-3 credits.
An ad hoc seminar for the exploration of new frontiers in curriculum and instruction. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2018

CURRIC 390 - TEACHING OF SCIENCE IN SECONDARY SCHOOLS 3 credits.

Enroll Info: Admission to Secondary Science Certification Progm. Con reg in CURRIC 290 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 393 - THE TEACHING OF SECONDARY SCHOOL MATHEMATICS
I
3 credits.
This course 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. Enroll Info: Adm to secondary program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 394 - THE TEACHING OF SECONDARY SCHOOL MATHEMATICS
II
3 credits.
This secondary methods course provides a more indepth examination of the issues associated with mathematics curriculum and instruction in secondary schools. A special emphasis is on curriculum choices and assessment practices. Enroll Info: CURRIC 393
Requisites: Sed3 or Sed4 or Eds
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 395 - USES OF TECHNOLOGIES IN SECONDARY SCHOOL

## MATHEMATICS

3 credits.
Introduces students to the calculator and computer technologies used in secondary school mathematics and to the ways these technologies can be used effectively in mathematics instruction. Enroll Info: Admission to Math cert prgm; at least 3 required Stats crses at 300 level or above; and a 4th required crse in Stats or con reg
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2014
CURRIC 396 - TEACHING OF ENGLISH
3 credits.
Enroll Info: Admission to English Educ cert progm; con enrl in

## CURRIC 296

Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 399 - INDEPENDENT STUDY
1-3 credits.

## Enroll Info: None

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

## CURRIC/C\&E SOC/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. Enroll Info: None Requisites: Sophomore standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC/MUSIC 409 - STUDENT TEACHING IN GENERAL AND VOCAL MUSIC
6-12 credits.
Supervised student teaching in general and vocal K -12 settings. Enroll Info: None
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: Fall 2020
CURRIC/MUSIC 410 - STUDENT TEACHING IN GENERAL AND INSTRUMENTAL MUSIC
6-12 credits.
Supervised student teaching in general and instrumental K -12 settings.
Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020
CURRIC 422 - THE TEACHING OF CHILDREN'S LITERATURE
3 credits.
Instructional strategies and curriculum development for teaching children's literature. Enroll Info: EED and completion of previous sequence coursework
Requisites: Students must be GR or EED
Repeatable for Credit: No
Last Taught: Fall 2012
CURRIC/ART ED 423 - STUDENT TEACHING IN ART IN ELEMENTARY SCHOOLS
2-6 credits.
Supervised student teaching, including curriculum development, instruction and assessment in elementary art classrooms. Enroll Info: None
Requisites: CURRIC/ART ED 323
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC/ART ED 424 - STUDENT TEACHING IN ART IN SECONDARY

## SCHOOLS

2-6 credits.
Supervised student teaching in secondary (middle or high school) art classrooms. Enroll Info: None
Requisites: CURRIC/ART ED 324
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 425 - CONCERNS AND CONSTRAINTS IN TEACHING YOUNG CHILDREN
3 credits.
Examines programmatic, professional, and technical forces that motivate and constrain teachers' work. Questions the assumptions and philosophies that are the foundation of various teaching practices. Enroll Info: Jr st or cons inst
Requisites: CFS or EED Classification
Repeatable for Credit: No
Last Taught: Spring 2012

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. Enroll Info: None
Requisites: THEATRE 160, 200, THEATRE/CURRIC/SLAVIC 362, 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
CURRIC/CSCS 427 - METHODS OF TEACHING FAMILY AND CONSUMER

## EDUCATION

3 credits.
Theory and principles of teaching and learning in family and consumer education. Enroll Info: None
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. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Fall 2018

## CURRIC 431 - YOUNG ADULT LITERATURE FOR SCHOOLS

3 credits.
Survey of needs and interests of young adults, with emphasis on young adult literature, reading interests, and use of trade books and other media in the junior/middle and senior high school curricula. Enroll Info: Jr or Sr st with initial preference given SED Jrs and Srs or admission to English ed or cons inst
Requisites: Sed program
Repeatable for Credit: No
Last Taught: Spring 2014

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. Students have the choice of developing an analog or digital game depending on their interest and skill set. Designed for students to build skills in designing interactive games using an iterative approach that incorporates user testing and feedback. It 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. Students will be exposed to a wide variety of independent games as well as the platforms used to create them. Enroll Info: None
Requisites: CURRIC 357
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 2020
CURRIC 440 - ELEMENTARYTEACHING PRACTICUM IV
3 credits.
Students will observe, supervise small groups, develop lesson plans for instruction, and teach a series of lessons in the related subject matter of social studies, science, dance/physical education, and music. Enroll Info: EED; CURRIC 370 373, Art Ed/CURRIC/ART ED 322, Ede Psych 301 Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2013

## CURRIC 442 - STUDENT TEACHING IN WORLD LANGUAGES (K-8)

 2-12 credits.An undergraduate course in semester two or three of a four-semester certification sequence; success in first semester courses as well as 'Intermediate High' minimum oral proficiency level in the target language are required. Enroll Info: Adm to French, German or Spanish TC progm CURRIC 243342
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
CURRIC 443 - STUDENT TEACHING IN WORLD LANGUAGES (6-12)
2-12 credits.
Practice teaching in world languages education programs (French, German, Spanish, etc.) in the secondary schools. Enroll Info: Adm to world lang TC progm CURRIC 243 342; appl on file in Fld Exper Off, 109 Education
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## CURRIC 454 - STUDENT TEACHING IN THE MIDDLE SCHOOL

 1-10 credits.Supervised student teaching in the middle school for elementary education majors and special certification students. Enroll Info: Adm to Elem TC Prog; CURRIC 370, 371, 372373 or concurrent registration Requisites: None
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 2020
CURRIC 458 - STUDENT TEACHING IN HISTORY AND SOCIAL STUDIES IN THE MIDDLE SCHOOL
2-12 credits.
Supervised student teaching in the middle school. Students employ and evaluate a variety of approaches to social studies curriculum and instruction. Enroll Info: Adm to stdt teaching prog; adv reg in 109 Educ Bldg
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 459 - STUDENT TEACHING IN HISTORY AND SOCIAL STUDIES IN THE HIGH SCHOOL
2-12 credits.
Enroll Info: Adm to secondary social studies educ progm
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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 PRE-KINDERGARTEN THROUGH MIDDLE SCHOOL TEACHING
1-2 credits.
Workshop to provide an opportunity to make specific plans for the fulltime teaching experience. Enroll Info: None
Requisites: CURRIC 371, 372, 373 and concurrent enrollment in
CURRIC 454, 464, or 468
Repeatable for Credit: No
Last Taught: Fall 2020

CURRIC 464 - STUDENT TEACHING IN THE ELEMENTARY SCHOOL 1-10 credits.

Sect 1: For undergraduate elementary education majors and special certification students. Sect 2: For child development majors satisfying kindergarten certification. Enroll Info: Adm to Elem or PK3 TC Prog; CURRIC 370, 371, 372373 or con reg
Requisites: None
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 465 - STUDENT TEACHING IN THE KINDERGARTEN 1-10 credits.

Enroll Info: Adm to PK3 TC Prog; CURRIC 370, 371, 372373 or con reg Requisites: None
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: No
Last Taught: Spring 2014
CURRIC 466 - STUDENT TEACHING IN MUSIC-ELEMENTARY 2-12 credits.

Enroll Info: Adv reg in stdt teach ofc, 109 Educ
Requisites: Declared in Music Education program with 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.

Enroll Info: Adv reg in field experience office, 109 Education
Requisites: Declared in Music Education program with 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 <br> 5-10 credits.

Student teaching for students in the Early Childhood/English as a Second Language certification program. Enroll Info: Admission to ESL certification program; successful completion of program semesters 1-3 Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC/ART ED 470 - PRACTICUM IN ELEMENTARY SCHOOL ART 3 credits.

Selection of appropriate instructional materials and their application to a practical problem in teaching to selected students. Enroll Info: None Requisites: Declared in Art Education
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

CURRIC/MATH 471 - MATHEMATICS FOR SECONDARY SCHOOL TEACHERS
3 credits.
This is a capstone course for future middle and high school teachers, drawing connections between higher mathematics and school mathematics. Enroll Info: None
Requisites: (MATH 341, 375, or 421) and MATH 461
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
CURRIC 472 - STUDENT TEACHING OF ENGLISH IN THE MIDDLE SCHOOL
2-12 credits.
Supervised student teaching in the middle school. Students employ and evaluate a variety of approaches to English curriculum and instruction. Enroll Info: Admission to English teacher cert progm. Adv reg in Educ Academic Services Off, B117 Education Bldg
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC/KINES 478 - ELEMENTARY SCHOOL PHYSICAL EDUCATION STUDENT TEACHING
2-8 credits.
Student teaching placement in elementary school setting. Enroll Info:

## None

Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC/KINES 479 - MIDDLE SCHOOL OR HIGH SCHOOL PHYSICAL EDUCATION STUDENT TEACHING
2-8 credits.
Student teaching placement in secondary school setting. Enroll Info: None
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 490 - STUDENT TEACHING IN SCIENCE IN THE HIGH SCHOOL 2-12 credits.

Enroll Info: Adm to secondary science educ prgm
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Art Education
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 494 - STUDENT TEACHING IN HIGH SCHOOL MATHEMATICS 2-12 credits.

Enroll Info: Adv reg in stdt tchg ofc, 109 Educ
Requisites: Sed4 or Sp
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 495 - STUDENT TEACHING IN SCIENCE IN THE MIDDLE SCHOOL
2-12 credits.
Supervised student teaching at the middle school. Students employ and evaluate a variety of approaches to science curriculum and instruction. Enroll Info: CURRIC 290, 390; admission to cert prog; appl on file in Fld Exper Off, 109 Education
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 496 - STUDENT TEACHING OF ENGLISH IN THE HIGH SCHOOL 2-12 credits.

Enroll Info: GPA of 2.75 in English. Adv reg in stdt tchg ofc, 109 Educ Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

CURRIC 497 - STUDENT TEACHING IN MIDDLE SCHOOL MATHEMATICS 4-12 credits.

Supervised student teaching at the middle school. Students employ and evaluate a variety of approaches to mathematics curriculum and instruction. Enroll Info: Adm to secondary math educ progm
Requisites: Sed4 or Sp
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info:

## Grad st or cons inst

Requisites: Graduate or special student standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: CURRIC/MUSIC 303 or 368, or equiv, or cons inst Requisites: Graduate or special student standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
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. Enroll Info:

## None

Requisites: Sophomore standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Admission to the Secondary Education Masters Program
Requisites: Graduate or special student standing
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 508 - IMPLEMENTING UNIVERSAL DESIGN: CURRICULUM DEVELOPMENT \& ANALYSIS
1 credit.
Participants will engage in joint inquiry and analysis of curriculum, instruction, assessment using principles of Universal Design and differentiation. Collegial dialogue protocols will be studied and utilized to interrogate previously taught or anticipated units of instruction. Outcomes of the process will be revision refinement of universally designed curricula. Enroll Info: Admission to the Secondary Education Masters Program and completion of CURRIC 507
Requisites: None
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 for students to connect teaching and learning theory and research knowledge to the practical setting of community based settings. It allows students to explore how community education is organized and educational services are delivered. It offers the students an opportunity to begin to interact with children, and to develop their identities as educators. Supervised by a UW supervisor and communitybased teacher educator, students will develop the necessary knowledge and skills required to work with students and educational professionals in a supervised community-based educational setting. Enroll Info: None
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 2020

## CURRIC 511 - SCHOOL-BASED PRACTICUM

1-4 credits.
Provides an opportunity for students to connect teaching and learning theory and research knowledge to the practical setting of schools. It allows students to explore how schools are organized and educational services are delivered. It offers the students an opportunity to begin to interact with students, and to develop their identities as educators. Supervised by a UW supervisor and school-based teacher educator, students will develop the necessary knowledge and skills required to work with students and educational professionals in a supervised schoolbased setting. Enroll Info: None
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 2020

## CURRIC/HISTORY/JEWISH 515 - HOLOCAUST: HISTORY, MEMORY AND EDUCATION <br> 3 credits.

This course explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, students will critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms. Enroll Info: Jr st or cons inst
Requisites: None
Course Designation: Gen Ed-Communication Part B
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 2020
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. Enroll Info: None
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

## 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. Enroll Info: None
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 2017
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. Enroll Info: None
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
CURRIC 536 - TEACHING DIVERSE YOUTH IN SECONDARY SCHOOL 2 credits.

Teaching Diverse Youth is designed to 1) to foster understandings of culturally relevant pedagogy and 2 ) to promote cultural awareness at the individual and institutional levels, and equitable and anti-racist behaviors as well as social justice in educational practices. As a class, we will examine the meanings of multicultural education and will work to understand how teachers can encourage, develop, and support learning, and create practices that establish high expectations for all learners. Students are expected to reflect on how they, the schooling they have experienced, and other social institutions participate in maintaining the hegemony and power of whiteness, middle class power, ableness, heterosexuality, and speaking English well. Enroll Info: Students may not earn credit for both CURRIC 536 and CURRIC 537
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2015
CURRIC 537 - TEACHING DIVERSE LEARNERS
3 credits.
This course is 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. Enroll Info: Admission to Masters of Science in Professional Education (MSPE) program
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## CURRIC 550 - METHODS, MATERIALS AND ACTIVITIES IN EARLY CHILDHOOD EDUCATION <br> 3 credits

Activities and materials for use in preschools and kindergartens related to different models of early childhood education, to developmentally appropriate curricular goals, and to professional practices of early childhood educators. Enroll Info: None
Requisites: Declared in the Elementary Education program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 559 - ADVANCED PRACTICES IN THE TEACHING OF SOCIAL STUDIES
3 credits.

This course assumes understanding and skill in basic classroom management, lesson and unit planning. Content will include research and practice on such topics as social studies instruction for diverse pupils, critical thinking, and authentic assessment. Enroll Info: CURRIC 359 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC/THEATRE 562 - DRAMA IN EDUCATION: ADVANCED STUDIES 3-4 credits.

Advanced studies in theories and practices of drama in education. Enroll Info: None
Requisites: 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
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. Enroll Info: Tchg experience or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

CURRIC 566 - PRACTICUM IN SPECIAL EDUCATION IN THE ARTS 1-3 credits.

Field experience with special education students in classroom settings in music and art. Enroll Info: Jr st in special field; completion or con reg in Curric 565; or cons inst
Requisites: Junior, senior, graduate, or special student standing
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
CURRIC/ART ED 570 - ART IN EXCEPTIONAL EDUCATION
3 credits.

Approaches to developing programs and teaching art to exceptional students in public schools, special schools, and community institutions. Enroll Info: None
Requisites: Declared in Art Education
Repeatable for Credit: No
Last Taught: Spring 2014
CURRIC 590 - ADVANCED PRACTICES IN THE TEACHING OF SCIENCE 3 credits.

Enroll Info: CURRIC 390 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 596 - ADVANCED PRACTICES IN TEACHING ENGLISH IN SECONDARY SCHOOLS
3 credits.

Using an inquiry framework in which beginning and experienced teachers act as researchers, this course will explore central issues of theory and practice in the teaching of English in middle and secondary schools.
Enroll Info: CURRIC 396 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Course deals with various theories of school, community, and workplace literacy, different approaches to literacy pedagogy and curricula, assessment practices, and interventions for learners with various needs. Enroll Info: Grad st
Requisites: Graduate or special student standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2019

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, lab experience. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
CURRIC/L I S 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. Enroll Info: None
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: Fall 2020

## CURRIC 626 - ACTION RESEARCH IN SCHOOLS

3 credits.
Provides instruction and support to students who want to conduct research on their own practices in schools. Enroll Info: None
Requisites: 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 inservice and field student teaching assignments. Learning materials and school systems program needs for children. Enroll Info: None

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

CURRIC 635 - EPISTEMOLOGY OF MATHEMATICS FOR TEACHERS 2 credits.

Course focuses on the nature of knowing mathematics. Enroll Info: Must be admitted to the Graduate Secondary Teacher Education Program Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2020
CURRIC 636 - MATHEMATICAL KNOWLEDGETEACHING
3 credits.
This course addresses the mathematical concepts necessary for the effective instruction of number and generalization at the middle school level. Enroll Info: None
Requisites: None
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.
This course addresses the mathematical concepts necessary for the effective instruction of rational number and proportional reasoning at the middle school level. Enroll Info: None
Requisites: None
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.
This course addresses the mathematical concepts necessary for the effective instruction of geometry, measurement, and trigonometry at the middle school level. Enroll Info: None
Requisites: None
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.
This course addresses the mathematical conepts necessary for the effective instruction of algebra and functions at the middle school level.
Enroll Info: None
Requisites: None
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.
This course addresses the mathematical concepts necessary for supporting students' abilities to conjecture, justify, and prove in middleschool mathematics. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
CURRIC 660 - EARLY CHILDHOOD EDUCATION
2-3 credits.
Trends, basic principles, issues, evaluation, and curriculum planning for the group education of preschool children. Enroll Info: Jr st
Requisites: Junior, senior, graduate, or special student standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC 662 - ELEMENTARY SCHOOL CURRICULUM

3 credits.
Basic concepts of curriculum, the relation of foundation areas to the problems of curriculum development, modern trends in developing educational programs for children. Enroll Info: Grad st or adm to 2nd deg elem TC Prog or Spec or cons inst
Requisites: Graduate or special student standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014
CURRIC 663 - LEARNING ENVIRONMENTS FOR INITIAL EDUCATION PROGRAMS
3 credits.
Historical residues, basic theories, and contemporary patterns of instruction underlying educational programs for the very young child (3-9). Integrating and contrasting features of comprehensive curricula for the very young: play, communication foundations, self concepts, health, performing arts, and other areas of educational concern. Enroll Info: None Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. We will 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## CURRIC 672 - ISSUES IN ESL EDUCATION

2-3 credits.
Overview of issues that influence and determine the language and academic development of English language learners. Students explore social, cultural and educational contexts and practices as they relate to the education of this population. Enroll Info: None
Requisites: Graduate standing or declared as Education Special Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Grad standing or Sp
Requisites: Graduate standing or special student
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 674 - ADVANCED METHODS IN TEACHING ENGLISH AS A SECOND LANGUAGE
3-6 credits.
Designed to help students 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. Enroll Info: Grad standing or Ed Sp, authorization required
Requisites: Graduate standing or special student
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CURRIC 675 - GENERAL SEMINAR

1-3 credits.
Enroll Info: Variable
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020

## CURRIC 676 - BILINGUALISM AND BILITERACY IN SCHOOLS

3-4 credits.
This course addresses issues in bilingual education, including: program design; patterns of language use; effective instruction to promote dual language development and biliteracy; integrated curriculum; assessment; history and context; national and local policy. It includes a practicum component. Enroll Info: Admission to the bilingual cert progm
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC/ED POL 677 - EDUCATION, HEALTH AND SEXUALITY: GLOBAL PERSPECTIVE AND POLICIES
3 credits.
Employs a lifecycle approach to examine the issues at the intersection of education and health that people face throughout the world, but especially in poor countries. Particular attention is placed on sexuality education, reproductive health, and infectious disease epidemics. Enroll Info: None
Requisites: None
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2013
CURRIC 690 - INDEPENDENT FIELD WORK
1-9 credits.
Enroll Info: None
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.
Enroll Info: None
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 2020

CURRIC 702 - SOCIOCULTURAL THEORY
3 credits.
Sociocultural theories posit that the fundamental mechanism for teaching and learning is social interaction. In this course, we will examine the varying positions within this general 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## CURRIC 704 - CURRICULUM PLANNING

3 credits.
The concept of curriculum in modern American education. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 706 - SECONDARY SCHOOL CURRICULUM
3 credits.
Functions of the secondary school, recent developments and varying approaches to goals, integration and balance in the curriculum. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2012
CURRIC 709 - DIGITAL MEDIA \& TECHNOLOGY IN SCHOOLS 1 credit.

Introduction for secondary educators to the role of digital media technologies in their classrooms. The course will cover major topics in digital media in teaching and students will be expected to design several instructional units that incorporate technology meaningfully into their classrooms. Enroll Info: None
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. Discussions will focus on education within and across home, community, and school contexts, including a focus on home-school-community relationships. Enroll Info: Summer registration is restricted to those admitted to Teach for Diversity MAT Degree Programs
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 <br> 3 credits.

This is a required course for all new doctoral or masters students in Cl in which they will become familiar with faculty, procedures, policy, and the wide range of research in this area. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 713 - TECHNOLOGY INTEGRATION FOR TEACHING AND LEARNING
1-3 credits.
This course provides a broad introduction to the field of Educational Communications and Technology (ECT) and attempts to balance theoretical inquiry with "hands on" design work. During the course, we will cover the theoretical foundations of ECT and explore new developments in technology, theory and practice. The goal is to open up 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. Enroll Info: None 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. Enroll Info: None
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 <br> 3 credits.

Introductory survey of empirical foundations of research. Development of methods and tools of research. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 718 - INTRODUCTION TO NARRATIVE INQUIRY
3 credits.
The course includes material on framing, generating, gatherine, and analyzing stories that people tell. Enroll Info: Grad or special students Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC/COUN PSY/ED POL/ED PSYCH/ELPA/RP \& SE 719 INTRODUCTION TO QUALITATIVE RESEARCH <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. The practicum shall involve evaluation and management of a variety of communicative disorders, as well as participation in the multi-disciplinary team process. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 721 - RESEARCH IN COMPUTING EDUCATION
3 credits.
Seminar on the history, theories, philosophies, tools, research, and technologies of Computing Education, with a focus on K-12 Computer Science Education. Enroll Info: None
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. Enroll Info: Graduate or special students may take the course, no prerequisistes.
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

## 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. From this premise, discussions will 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. This class is to facilitate thinking about how regional and national representations of people go unexamined in school curriculums when studying "others". Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## CURRIC 729 - CLASSROOM MANAGEMENT FOR SECONDARY EDUCATORS <br> 1 credit.

Classroom Management for Secondary Educators is designed to inform students of basic principles of good classroom management within a social justice framework. That is, students will 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 731 - COLLABORATIVE TEAMWORK FOR INCLUSIVE SCHOOL REFORM
3 credits.
The process of collaboration and its multiple forms among professionals in the creation of inclusive school communities are critically examined. Various methods and tools for collaboration are explored 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. Class participants acquire skills to engage in collaborative teamwork and act as change facilitators within a school system. Enroll Info: Admission to the Masters of Science for Professional Educators program, graduate standing, or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

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. Enroll Info: None
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.
Public understanding of science and science literacy are both more and less necessary than we might think, and the capacity of non-scientists to make sense of science is a matter of rich and ongoing debate. Explore what it means for science to matter in everyday life through research, theory, and concrete examples. Readings are drawn from across the humanities and social sciences, with particular attention to the interdisciplinary field of science and technology studies. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 735 - EPISTEMIC PRACTICE AND SCIENCE TEACHING 2 credits.

This course 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? This course is part of the Secondary Teacher Education Master's with Certification program for students pursuing Secondary science teacher certification. Other interested students may inquire about the course by contacting the instructor. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## CURRIC 737 - LINGUISTICS FOR EDUCATORS

3 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 their own experiences as language users, language learners, language analysts and language advocates, it enhances understanding of communicative repertoires as dynamic, fluid, and complex. Enroll Info: None
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.
This course will explore 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 your students to improve teaching and learning. This course is part of the Secondary Teacher Education program for students pursuing Master's with Teacher Certification. Enroll Info: None
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. The course 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. Enroll Info: None 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Fall 2017

## 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. Enroll Info: None
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
CURRIC/ELPA 748 - PROSEMINAR: ISSUES \& PROBLEMS IN TEACHING-LEARNING IN ADULT EDUC 3 credits.

A planned, systematic analysis of basic issues; instructional group strategies, instructional modes, independent learning, etc. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## CURRIC 764 - GLOBALIZATION AND LINGUISTIC HUMAN RIGHTS IN EDUCATION <br> 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. Enroll Info: None
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. Enroll Info: Enrolled in Departmental Global Studies, Teaching, and the Curriculum (GSTC) program or cons inst
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.
Inspired by a symposium entitled "Literacy as a Civil Right" featured at the American Educational Research Association Annual Meeting in Chicago, Illinois in April 2007 and Stuart Greene's (2008) edited volume Literacy as a civil right: Reclaiming social justice in literacy education, this seminar will 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. Throughout this course, students will examine the significance of upholding literacy as "civil" and "human" rights. Additionally, students will also 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. Enroll Info: None
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. Students will become knowledgeable about pivotal qualitative studies in language, literacy, and culture as they begin to develop their own identities as methodologists. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
CURRIC 778 - TEACHING, LITERACIES, AND IDENTITIES
3 credits.
In this class, we will explore issues related to identity through three interrelated concepts--teaching, literacies, and diversity--froma variety of perspectives, including psychology, sociology, narrative studies, and sociocultural perspectives. Within each perspective we will explore what "identity" means and how each conceptualization is related to teaching and learning, especially for children from diverse communities and backgrounds. Enroll Info: None
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. Enroll Info: None
Requisites: RP \& 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: Summer 2020
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. Enroll Info: None
Requisites: RP \& 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 2020
CURRIC 790 - MASTER'S PROJECT OR THESIS
1-9 credits.
Planning and completing a master's project or thesis. Enroll Info: None 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 799 - MASTER'S INDEPENDENT STUDY
1-3 credits.
Student-designed opportunity to explore a subject in depth. Open to master's students. Enroll Info: None
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 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
CURRIC/ED PSYCH/LIS 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## CURRIC 805 - GUIDING AND DIRECTING THE SCHOOL READING <br> PROGRAM <br> 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. Enroll Info: Cons inst
Requisites: Graduate or special student standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 810 - GOALS, CONTENT AND PROGRAMS IN MATHEMATICS EDUCATION
3 credits.
Persistent issues. Analysis of current programs and the identification of the mathematical content of K -12 education. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

CURRIC 811 - THE INSTRUCTION OF MATHEMATICS 3 credits.

Persistent issues. Analysis of current research and examination of current programs to identify how they reflect different theories of learning and instruction. Enroll Info: CI 810 or cons inst
Requisites: Graduate/professional standing
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. Enroll Info: Cl 811 or cons inst
Requisites: 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
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## CURRIC 829 - PROSEMINAR IN AMERICAN CURRICULUM THEORY: <br> 1890-PRESENT <br> 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. Enroll Info: CURRIC 662 or 704 or 706 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
CURRIC 830 - THEORY AND DESIGN OF THE CURRICULUM
3 credits.
Dimensions of theory and their interrelationships with reference to the curriculum field. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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. Enroll Info: None
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
CURRIC 840 - FIELD WORK IN SCHOOL READING PROGRAMS
2-7 credits.
Supervised field experience in working with school-wide reading programs. Enroll Info: Cons inst
Requisites: Graduate or special student standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## CURRIC 864 - SEMIOTICS FOR EDUCATION

1-3 credits.
This course is dedicated to Semiotics or the study sign action for Education purpose, described as any activity or process including the production of meaning and apprenticeship. Enroll Info: None
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. Enroll Info: None
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

CURRIC 910 - SEMINAR-CURRICULUM DEVELOPMENT
3 credits.
Enroll Info: None
Requisites: 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 916 - SMR: SPECIAL TOPICS IN RESEARCH \& EVALUATION IN

## CURRICULUM \& INSTRUCTION

3 credits.
Enroll Info: None
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

## 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. This course 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. We will seek to ground our discussions in concrete examples of educational practice. We will also consider historical and contemporary critiques of environmental education. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 942 - SEMINAR IN RESEARCH ON MATHEMATICS EDUCATION 1-3 credits.

Selected investigations; design of individual research activities; advanced level. Enroll Info: None
Requisites: 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.
Designed to engage students 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## CURRIC 945 - SEMINAR IN MUSIC EDUCATION

2-3 credits.
Subject differs each semester; comprehensive issues, including current views on topics such as psychology of music; sociology of music; aesthetics. Enroll Info: Grad st or Spec with tchg exper or cons inst Requisites: Graduate standing or special student
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013
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. Enroll Info: Grad st or Spec with tchg exper or cons inst
Requisites: Graduate standing or special student
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Students identify and investigate topics affecting them and their schools. Enroll Info: Grad st or cons inst
Requisites: Graduate standing or special student
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info:

## None

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. Enroll Info: None
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/ART ED 951 - SEMINAR IN ART EDUCATION

3 credits.
Examination and analysis of ideas and studies in art education and related areas preparatory to formulating research problems. Enroll Info: None
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

## CURRIC 955 - SEMINAR IN ADVANCED VALUES AND CHARACTER EDUCATION <br> 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.

## Enroll Info: None

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. Enroll Info: None
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. Enroll Info: None
Requisites: 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.

Seminar intended to help graduate students in World Language
Education, Second Language Acquisition, and any language area develop a review of literature and a research project. Enroll Info: None
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. Enroll Info: None
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

## 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. Enroll Info: CURRIC 500 or 503 or cons inst
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
CURRIC 990 - DISSERTATION RESEARCH
1-12 credits.
Planning and completing a doctoral dissertation. Restricted to students with dissertator status in Curriculum and Instruction. Enroll Info: None
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 991 - POST-SECONDARY TEACHING PRACTICUM 3 credits.

Opportunity for students to gain an understanding about the design and instruction of teacher education courses. Enroll Info: Open only to Curriculum and Instruction doctoral students.
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
CURRIC 999 - DOCTORAL INDEPENDENT STUDY
1-3 credits.
Student-designed opportunity to explore a subject in depth. Open to doctoral students. Enroll Info: None
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

## 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 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 Diary Sci 399. Enroll Info: So st, and consent of supervising instructor and academic advisor.
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2018

## DY SCI/AN SCI 101 - INTRODUCTION TO ANIMAL SCIENCES

4 credits.
Anatomy physiology, nutrition, genetics, reproduction, marketing, meats and management of dairy and beef cattle, swine, sheep, poultry and horses; lectures, laboratories and discussion. Field trips. Enroll Info: None 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 2020

## 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. Enroll Info: None Requisites: DY SCI/AN SCI 101
Repeatable for Credit: No
Last Taught: Spring 2019

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. Includes farm visits and analysis. Enroll Info: None
Requisites: DY SCI/AN SCI 101
Repeatable for Credit: No
Last Taught: Fall 2020
DY SCl 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. Includes farm visits and a handson transition cow project for analysis. Enroll Info: Dairy Science/Animal Science 101 or consent of instructor, successful completion of Dairy

## Science 233

Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
DY SCI 272 - PRE-CAPSTONE SEMINAR
1 credit.
In this course, students develop individualized four-year course plans, learn about internships and job opportunities, and discuss leadership development opportunities. Students learn about, and prepare for, active and independent learning from juniors and seniors who have successfully completed independent learning projects including internships, senior seminars and other "capstone" experiences. Intended for prospective or declared Dairy Science majors in their first year or who have not completed DY SCI 399 - Internship Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
DY SCI 289 - HONORS INDEPENDENT STUDY
1-2 credits.
Enroll Info: Enrolled in the CALS Honors Prgm Sophomore or Junior standing. INTER-AG 288
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.
Enroll Info: Open to Freshmen, Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## DY SCI 305 - LACTATION PHYSIOLOGY

3 credits.
The course 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. This course has a laboratory component. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101 or ZOOLOGY/BIOLOGY/
BOTANY 151 and ZOOLOGY/BIOLOGY/BOTANY 152) and
(BMOLCHEM 314 or BIOCHEM 501 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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## DY SCI/AN SCI/NUTR SCI 311 - COMPARATIVE ANIMAL NUTRITION

 3 credits.Nutrients and their source, assimilation, function and requirement. Enroll Info: None
Requisites: Must have completed BMOLCHEM 314 Intro to Human Biochemistry or CHEM 341 Intro Organic Chemistry or CHEM 343 Intro Organic Chemistry or BIOCHEM 501 Intro Biochemistry
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 2020
DY SCI/AN SCI 313 - ANIMAL FEEDS AND DIET FORMULATION
1 credit.
Designed as a companion course for Dairy Science 311 (comparative animal nutrition) with emphasis on quantitative and practical aspects of animal feeds and diet formulation. Enroll Info: MATH 112, Dy Sci/AN SCI/ DY SCI 101, or consent of instructor; concurrent registration in Dy Sci/An Sci/NUTR SCI/AN SCI/DY SCI 311 recommended

## Requisites: DY SCI/AN SCI 101

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 2019

DY SCI/AN SCI 320 - ANIMAL HEALTH AND DISEASE MANAGEMENT 3 credits.

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. Enroll Info: ZOOLOGY/BIOLOGY 101/102, BIOLOGY/BOTANY/ ZOOLOGY 152, Biocore or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## DY SCI/AN SCI 361 - INTRODUCTION TO ANIMAL AND VETERINARY GENETICS <br> 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. Enroll Info: Genetics 160 or 466 or con reg course in statistics
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
DY SCI/AN SCI 362 - VETERINARY GENETICS
2 credits.
The genetic basis for predisposition to diseasse or resistance to disease in livestock and companion animal species. Genetic defects, their discovery, diagnosis and treament. Enroll Info: Dy Sci/AN SCI/
DY SCI 361; or Genetics 160 or 466 Zool/Bot 152
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Dy Sci/AN SCI/DY SCI 361
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## DY SCI/AN SCI 370 - LIVESTOCK PRODUCTION AND HEALTH IN AGRICULTURAL DEVELOPMENT <br> 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. Enroll Info: An Sci/DY SCI/ AN SCI 101 or cons inst

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: None

## Requisites: Consent of instructor

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017
DY SCI/AN SCI 373 - ANIMAL PHYSIOLOGY
3 credits.
Students will develop an understanding of physiological processes that regulate the body, learn the anatomy and function of different physiological systems, describe interactions between organ systems, study regulation of an organ system from the molecular to whole animal level, and identify differences between species in the same systems. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 or (BOTANY/BIOLOGY/
ZOOLOGY 151 and BOTANY/BIOLOGY/ZOOLOGY 152)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## DY SCI 375 - SPECIAL TOPICS

1-4 credits.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

DY SCI 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION 1-8 credits.

Enroll Info: So, Jr or Sr st cons supervising inst, advisor, and internship coordinator
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 2020
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
DY SCI/AN SCI 414 - RUMINANT NUTRITION \& METABOLISM 3 credits.

Ruminant Nutrition 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. Enroll Info: None
Requisites: NUTR SCI/AN SCI/DY SCI 311 and (BIOCHEM 301 or 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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## DY SCI/AN SCI 434 - REPRODUCTIVE PHYSIOLOGY

3 credits.
Principles of reproductive physiology, improvement of fertility, and artificial insemination. Enroll Info: Jr st, An Sci/DY SCI/AN SCI 101, or Zool 101 102; Zool 151152 recommended
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## DY SCI/AGRONOMY/INTER-AG 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. Enroll Info: None 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: DY SCI/AN SCI/FOOD SCI/SOIL SCI 472
Course Designation: Sustain - Sustainability
Repeatable for Credit: No

## DY SCI 534 - REPRODUCTIVE MANAGEMENT OF DAIRY CATTLE

 3 credits.This course is designed to provide students with the technical knowledge and practical skills to design and execute an effective reproductive management program for dairy cattle. Each week students will participate in lectures and discussions of the key reproductive physiology and practical research results that underlie reproductive management programs. Students will also participate in hands-on laboratories twice per week in which they will learn, practice, and demonstrate practical reproductive management techniques including: Semen handling, artificial insemination, and ultrasound of ovaries and uterus. Enroll Info:

## None

Requisites: DY SCI/AN SCI 434
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
DY SCI 535 - DAIRY FARM MANAGEMENT PRACTICUM

## 3 credits.

Principles of nutrition, breeding, reproduction, and management at the farm level are integrated. Students will develop skills in decision making, information gatering, problem solving, and interpersonal communication through fieldtrips to working commercial dairy operations. Enroll Info:

## DY SCI 233, 434, 361

Requisites: Must have completed or be enrolled in Dairy Science 433 Dairy Herd Management, Dairy Science 434 Reproductive Physiology and Dairy Science 361 Introduction to Animal and Veterinary Genetics.
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
DY SCI 681 - SENIOR HONORS THESIS
2-4 credits.
Enroll Info: Honors candidacy
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
DY SCI 682 - SENIOR HONORS THESIS
2-4 credits.
Continuation of 681. Enroll Info: Honors program candidacy DY SCI 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2009
DY SCI 699 - SPECIAL PROBLEMS
1-3 credits.
Enroll Info: Sr st cons inst
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 2020

## DY SCI 799 - PRACTICUM IN DAIRY SCIENCE TEACHING

 1-3 credits.Instructional orientation to teaching at the higher eductation 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Students should have undergraduate coursework in ruminant nutrition, biochemistry, and microbiology as background. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## 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. Students should have undergraduate coursework in ruminant nutrition, biochemistry, and microbiology as background. Enroll Info: None
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.
Enroll Info: None
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
DY SCI 900 - SEMINAR
1 credit.
Comprehensive reviews of research aimed at broadening understanding of dairy science. Enroll Info: Dairy Science 690
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

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. Enroll Info: None Requisites: 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
DY SCI/AN SCI/GENETICS 951 - SEMINAR IN ANIMAL BREEDING
0-1 credits.

Enroll Info: None
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.
Enroll Info: None
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

## DANCE (DANCE)

DANCE 1 - WORKSHOP IN DANCE ACTIVITY
1-2 credits.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
DANCE 2 - 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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2020

## DANCE 3 - BALLROOM DANCE II

1 credit.
An advanced beginner level class designed to improve and expand the skills introduced in DANCE 002. The following dances may be taught, or complex variations added to dances already known: Fox trot, Swing/ Jitterbug, Waltz, Cha-cha, Tango, Rumba, Merengue, Polka, and other Latin dances, if time permits. Enroll Info: None
Requisites: DANCE 2
Repeatable for Credit: No
Last Taught: Spring 2019
DANCE 4 - MODERN JAZZ DANCE
1 credit.
Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
DANCE 11 - 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## DANCE 12 - CONTEMPORARY DANCE II

1 credit.
Continuation of DANCE 11. Enroll Info: None
Requisites: DANCE 11
Repeatable for Credit: No
Last Taught: Spring 2017
DANCE 21 - 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 utilizing experiential learning. Enroll Info:
None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
DANCE 22 - BALLET II
1 credit.
Continuation of DANCE 21. Beginning dance, 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 utilizing experiential learning. Enroll Info: None
Requisites: DANCE 21
Repeatable for Credit: No
Last Taught: Spring 2020

## DANCE 56 - MOVEMENT IMPROVISATION

1 credit.
Introductory level exploration of movement improvisation. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None
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
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. Enroll Info: None Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
DANCE 115 - HIP-HOP DANCE TECHNIQUE AND THEORY 1 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 21 st centuries in America. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Fall 2020

## DANCE 116 - WORKSHOP IN WORLD DANCE

2 credits.
Exploration in different traditional or folk dance forms from around the world. Enroll Info: None
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. Enroll Info: None

## Requisites: None

Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: DANCE 125
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## DANCE 131 - SOMATIC THEORY AND PRACTICES

2 credits.
Integration of body and mind is explored through various somatic
practices. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
DANCE 136 - PILATES EQUIPMENT I
2 credits.
Focuses on learning Level III (Lab I) exercises on the Pilates equipment, which includes the Reformer, Cadillac, Low Chair, and High Barrel. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2018

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## DANCE 144 - RHYTHMIC TRAINING FOR DANCERS

2 credits.
The study of rhythmic theory to educate dancers about musical time and structure. Basic notation, aural comprehension of rhythm, and rhythm activities are emphasized. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2012

## DANCE 152 - DANCE PERFORMANCE WORKSHOP

1 credit.

Practice and experience in performing in the early stages of development. Enroll Info: None
Requisites: DANCE 111 or 112
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2011
DANCE 156 - MOVEMENT AS MATERIAL THROUGH IMPROVISATION 2 credits.

Use of improvisation to develop a personal movement vocabulary and explore compositional form. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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. Enroll Info: None
Requisites: Declared in Dance or Dance
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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
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. Enroll Info: None
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
DANCE 200 - WRITING THE MOVING BODY
3 credits.
Examines performance texts from the 20th century to the present, and applies them through written analyses. Enroll Info: None
Requisites: None
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:
None
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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info:

## None

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## DANCE 213 - NEW MOVEMENT TECHNIQUES

1-2 credits.
Exploration of new movement techniques in dance outside of traditional forms and methods. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2014

DANCE/THEATRE 218 - AFRICAN DANCE PERFORMANCE
2 credits.
Technique, practice and performance of complex African and Africanbased 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. Enroll Info: None
Requisites: DANCE 118
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 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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: DANCE 225
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
DANCE 232 - INTRODUCTION TO DYNAMICS OF DANCE THERAPY 2 credits.

Fieldwork in community programs. Enroll Info: None
Requisites: DANCE 231
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
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. Enroll Info: None
Requisites: DANCE 135
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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 crosstraining 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. Enroll Info: None
Requisites: DANCE 136
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2019

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. Enroll Info: None
Requisites: DANCE 236
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2019

## DANCE 240 - DANCE PRODUCTION LABORATORY

1 credit.
Provides hands-on experience working with the technical aspects of dance program performances. Enroll Info: None
Requisites: DANCE 140
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MUSIC 111 or 151
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: DANCE 156
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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 2020
DANCE 265 - DANCE HISTORY I: WESTERN THEATRICAL DANCE FROM THE RENAISSANCE THROUGH THE 1920 S
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. Enroll Info: None
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

## DANCE 268 - POLITICAL AND CULTURAL PERSPECTIVES IN DANCE STUDIES <br> 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. Enroll Info: None
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 2020
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.
Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

DANCE 312 - CONTEMPORARY DANCE TECHNIQUE AND THEORY VI 1-3 credits.

Continuation of DANCE 311. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: None 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 2020

## DANCE/FOLKLORE/THEATRE 321 - JAVANESE PERFORMANCE

2 credits.
Technique and practice of classical Javanese dance in its musical, historical and cultural contexts. Enroll Info: None
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. Enroll Info: None

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info:
None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
DANCE 330 - FUNCTIONAL ANATOMY FOR MOVEMENT PRACTICES 1 credit.

Provides an understanding of functional anatomy in kinetic terms.
Explorex 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. Enroll Info: None
Requisites: DANCE 131, 135, or 136
Repeatable for Credit: No
Last Taught: Fall 2019
DANCE 331 - DYNAMICS OF DANCE THERAPY
3 credits.

Movement lab integrating theory and techniques of dance therapy. Field work in community service projects. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: DANCE 235, 237, and 336
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2018

## DANCE/ART 341 - SOUND DESIGN FOR THE PERFORMING AND VISUAL ARTS <br> 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: DANCE 255 or 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
DANCE 360 - CURRENT TOPICS IN DANCE
1-3 credits.
A special topics course that addresses various areas in the field. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None
Requisites: DANCE 265
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
DANCE 372 - TEACHING OF DANCE TO ADULTS
3 credits.

Theory and practice. Student participation in the teaching of movement as a creative dance experience. Enroll Info: None
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: Fall 2011

## 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. Enroll Info: None
Requisites: DANCE 133, 157, and 255 or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: DANCE 135
Repeatable for Credit: No
Last Taught: Spring 2019
DANCE 376 - PILATES TEACHING I
3 credits.

Complete a minimum of 3 hours of teaching per week (or equivalent) working with individuals and/or group classes. Pilates Teaching I candidates teach Level I-III work. Attend periodic seminars and mentor meetings. Enroll Info: None
Requisites: Declared in Pilates Certificate and DANCE 237
Repeatable for Credit: No
Last Taught: Fall 2019

DANCE 399 - INDEPENDENT PROJECT
1-3 credits.

## Enroll Info: None

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 2020
DANCE 411 - CONTEMPORARY DANCE TECHNIQUE AND THEORY VII 1-3 credits.

Level IV. Advanced level. A wide range of movement experiences emphasizing increasing complexity of design and rhythmic structure.
Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2011

DANCE 412 - CONTEMPORARY DANCE TECHNIQUE AND THEORY VIII 1-3 credits.

Continuation of DANCE 411. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2012

## DANCE/FOLKLORE/THEATRE 421 - JAVANESE PERFORMANCE REPERTORY <br> 2 credits.

Introduction to Javanese theatre performance in a Javanese epic tradition. Includes use of Javanese gamelan music as accompaniment
for dance drama. Enroll Info: None
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
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. Enroll Info: None
Requisites: DANCE 331
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

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. Enroll Info: None
Requisites: 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. Enroll Info: 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 2020
DANCE 452 - DANCE REPERTORY THEATER
1-3 credits.
Study of choreography created by member of the faculty and guest artists, leading to public performance. Enroll Info: 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 2018
DANCE 455 - DANCE COMPOSITION III
2 credits.
Principles of organization in group composition. Planning, composing and presenting of group dances. Enroll Info: None
Requisites: DANCE 255 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 2020
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. Enroll Info: None
Requisites: DANCE 355 and 365
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Senior standing, DANCE 355 and 365
Repeatable for Credit: No
Last Taught: Spring 2020
DANCE 469 - INTERDISCIPLINARY STUDIES IN THE ARTS
1-4 credits.
Guest artists present topics appropriate to their specializations. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
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. Enroll Info: None
Requisites: Declared in Pilates Certificate, DANCE 337 and 376
Repeatable for Credit: No
Last Taught: Fall 2018
DANCE 560 - CURRENT TOPICS IN DANCE: WORKSHOP
1-3 credits.
Enroll Info: None
Requisites: None
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
DANCE 699 - INDEPENDENT PROJECT
$0-3$ credits.
Enroll Info: None
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 2020
DANCE 999 - INDEPENDENT PROJECT
1-3 credits.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
DS 120 - DESIGN: FUNDAMENTALS I
3 credits.
Elements and principles of design. Lecture and studio experience relevant to design of the visual environment. Enroll Info: None
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 2020

## 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 realworld project. This course will provide students with the foundation necessary to continue as interior architecture majors. Enroll Info: None 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No

## 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. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: DS 153
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: DS 120 and DS 154
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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.
Enroll Info: None
Requisites: DS 120 and (M E 160 or ART 112)
Repeatable for Credit: No
Last Taught: Spring 2020

## DS 221 - PERSON AND ENVIRONMENT INTERACTIONS

3 credits.
Effects of building and outdoor spaces on people over the life course.
Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: DS 220 and declared in Interior Architecture program
Repeatable for Credit: No
Last Taught: Fall 2020
DS 223 - INTERIOR ARCHITECTURAL DESIGN
3 credits.
Building components, construction, interpretation of working drawing, and the process of project development. Enroll Info: None
Requisites: DS 222
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Interior Architecture program
Repeatable for Credit: No
Last Taught: Fall 2020

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.

## Enroll Info: None

Requisites: DS 210 and 253
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2015

## DS 227 - TEXTILE DESIGN: PRINTING AND DYEING I

3 credits.
Surface design developed in print and resist techniques using historic and contemporary methods. Enroll Info: None
Requisites: DS 120 and 153
Repeatable for Credit: No
Last Taught: Spring 2020

## DS 228 - TEXTILE EMBELLISHMENT I

3 credits.
Historic and contemporary design techniques for embellishing textiles; including embroidery, beadwork and appliqué. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Interior Architecture program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: DS 241
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None

## 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 2020
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.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
DS 253 - PATTERNMAKING FOR APPAREL DESIGN
3 credits.

The theory and principles of pattern making through flat pattern and draping techniques. Enroll Info: None
Requisites: DS 154
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: DS 101 and DS 154
Repeatable for Credit: No
Last Taught: Fall 2020

DS 320 - DESIGN: SKETCHING AND RENDERING
4 credits.
Introduction to various drawing media and techniques for visually communicating design concepts. Enroll Info: None
Requisites: M E 160 and ART 112
Repeatable for Credit: No
Last Taught: Fall 2012

## 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. Enroll Info: None
Requisites: DS 222
Repeatable for Credit: No
Last Taught: Spring 2020

## DS 323 - COMPUTER AIDED DESIGN: ARCHITECTURE AND INTERIORS

3 credits.
The class emphasized the use of CAD (Computer Aided Design) as a design/problem solving method, and as a means of creating both construction documents and presentation drawings. Three dimensional CAD drawings are created using both parallel and perspective projection techniques. Enroll Info: None
Requisites: M E 160
Repeatable for Credit: No
Last Taught: Fall 2012

## DS 327 - TEXTILE DESIGN: MANUAL/COMPUTER GENERATED IMAGERY AND PATTERN <br> 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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-word problems with real-world constraints and the limitations of technology. Projects range from ways to improve everyday situations to community issues. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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". Enroll Info: None
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 2020
DS/BSE/LAND ARC 356 - SUSTAINABLE RESIDENTIAL CONSTRUCTION 3 credits.

Properties and use of building materials, framing systems, HVAC
systems, code requirements, conservation of natural resources in
building construction and operation. Enroll Info: None
Requisites: MATH 112, 114, or 171
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: DS 120 or ART 104
Repeatable for Credit: Yes, unlimited number of completions

## DS/ART HIST 363 - AMERICAN DECORATIVE ARTS AND INTERIORS: <br> 1620-1840 <br> $3-4$ credits.

Interdisciplinary study of the design, production, and consumption of household objects and their American domestic settings, 17th through the early 19th centuries. Enroll Info: None
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 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. Enroll Info: 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. Enroll Info: This is not a course that can be enrolled in at UWMadison
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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: This is not a course that can be enrolled in at UW-Madison
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## DS 420 - TWENTIETH CENTURY DESIGN

3 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. Enroll Info: None
Requisites: DS 120 or ART 104
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 2012

## 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. Enroll Info: None
Requisites: DS 120 or (ART HIST 201 and ART HIST 202)
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
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. Enroll Info: None
Requisites: DS 421 or (ART HIST 201 and 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 2020
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. Enroll Info: None
Requisites: DS 227 and 327
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None Requisites: DS 228
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: DS/ART 229
Repeatable for Credit: No
Last Taught: Fall 2020
DS 430 - HISTORY OF TEXTILES
3 credits.
Designs and meanings and interrelationships of textiles in selected cultures and time periods. Enroll Info: None

## 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 2020

## 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. Enroll Info: None
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: Fall 2020

## DS/ART HIST/HISTORY 464 - DIMENSIONS OF MATERIAL CULTURE

 3 credits.Approaches to the interdisciplinary study of the material world in order to analyze broader social and cultural issues. Guest speakers explore private and public objects and spaces from historic, ethnographic, and aesthetic perspectives. Enroll Info: None
Requisites: One course 300-level or higher in ART HIST or DS
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 2012

DS 501 - SPECIAL TOPICS
1-3 credits.
Specialized subject matter of current interest to undergraduate students. Enroll Info: 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: Fall 2020

## DS/COMP SCI/I SY E 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". Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## DS 528 - EXPERIMENTAL TEXTILE DESIGN

2-3 credits.
Experimental design and decorative principles; elements and techniques for the animation of textile surfaces. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Spring 2020

## DS 545 - PLACEMAKING

3 credits.
Studies the affective qualities of man-made environments. Seeks understanding of specific qualities found in environments and the conditions that produce them. Students are encouraged to develop and implement a personal design philosophy. Enroll Info: None
Requisites: Junior standing and declared in Interior Architecture
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 2011

## DS 549 - ENVIRONMENTAL CONTROL SYSTEMS: LIGHTING, ACOUSTICS, AND THERMAL COMFORT IN BUILDINGS <br> 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. Enroll Info: None 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 2020

## 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.

## Enroll Info: None

Requisites: DS 224 or DS 251
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 COMP SCI 559: Computer Graphics) or in 3D modeling (such as ART 429: 3D Digital Studio I or DS 242: Visual Communication II). Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## DS 610 - APPAREL DESIGN: PROFESSIONAL PRACTICES

3 credits.
Professional orientation for apparel designers. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: DS 322
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: DS 622
Repeatable for Credit: No
Last Taught: Spring 2020

DS 624 - INTERIOR ARCHITECTURE PROFESSIONAL PRACTICE 3 credits.

Prepares Interior Architecture majors to launch their careers in design. Become cquainted with aspects of the interior design profession: how an office works, the project delivery process in interior design practice, and post-graduation material preparation. Enroll Info: None
Requisites: DS 322
Repeatable for Credit: No
Last Taught: Spring 2020
DS 626 - INTERIOR DESIGN V
4 credits.
Provides students the opportunity to collaborate with design professionals on potential projects ranging from health care, education, hospitality, and retail. Students will follow the design process from programming to construction documents. 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, and more. Enroll Info: None
Requisites: DS 622
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Junior 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: Fall 2020
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-word problems with real-world constraints and the limitations of technology. Projects range from ways to improve everyday situations to community issues. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
DS 699 - INDEPENDENT STUDY
1-6 credits.
Directed study projects for juniors and seniors as arranged with a faculty member. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None 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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## DS 990 - RESEARCH AND THESIS

1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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

DS 999 - INDEPENDENT STUDY
1-3 credits.
Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## EAST ASIAN AREA STUDIES (E A STDS)

## E A STDS/ASIAN/HISTORY 103 - INTRODUCTION TO EAST ASIAN HISTORY: CHINA <br> 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. Enroll Info: None
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

## E A STDS/ASIAN/HISTORY 104 - INTRODUCTION TO EAST ASIAN HISTORY: JAPAN <br> 3-4 credits.

Survey of major cultural, social, political and economic developments in Japanese history from ancient to recent times. Enroll Info: None
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

## E A STDS/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. Enroll Info: None
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

E A STDS 270 - HUMANITIES TOPICS IN EAST ASIAN STUDIES 1-3 credits.

Interdisciplinary approaches to specific humanities topics in East Asian studies. Topics may include comparative analysis of a theme across the countries in the East Asian region or focus on a theme within a single country. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Spring 2020

## E A STDS/ASIAN/ASIAN AM/HISTORY 276 - CHINESE MIGRATIONS SINCE 1500 <br> 3-4 credits.

Introduces the comparative history of Chinese migrations to the U.S. and world. Examines patterns of movement; imagined communities through cultural identity, citizenship, queerness, heritage tourism, studying
abroad, and transnational adoption; as well as sites of cultural production such as food, literature, architecture, and cinema. Enroll Info: Sophomore standing or consent of instructor
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 2020
E A STDS 299 - DIRECTED STUDY
1-3 credits.

## Enroll Info: None

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

## E A STDS/ASIAN 301 - SOCIAL STUDIES TOPICS IN EAST ASIAN STUDIES <br> 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. Enroll Info: None
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 2020

## E A STDS/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. Enroll Info: None
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 2020
E A STDS/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. Enroll Info: None
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 2017

## E A STDS/ASIAN/HISTORY 341 - HISTORY OF MODERN CHINA, 1800-1949 <br> $3-4$ 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. Enroll Info: None
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 2017

## E A STDS/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. Enroll Info: So st
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 2020

## E A STDS/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. Enroll Info: None
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 2017
E A STDS/ASIAN/HISTORY 454 - SAMURAI: HISTORY AND IMAGE 3-4 credits.

Japanese warriors, their ideals, and their images from the tenth century to the present. Enroll Info: None
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 2016

## E A STDS/ASIAN/HISTORY 456 - PEARL HARBOR \& HIROSHIMA: JAPAN, THE US \& THE CRISIS IN ASIA <br> 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. Enroll Info: None
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

## E A STDS 681 - SENIOR HONORS THESIS

3 credits.
Senior honors thesis in East Asian area studies. Enroll Info: None
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 2013

## E A STDS 682 - SENIOR HONORS THESIS

3 credits.

Senior honors thesis in East Asian area studies. Enroll Info: E A STDS 681, consent of faculty adviser
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 2014
E A STDS 691 - SENIOR THESIS
3 credits.
Individual research guided by a faculty mentor. A requirement for honors credit. Enroll Info: Sr st. E A Stds major
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 2012
E A STDS 692 - SENIOR THESIS
3 credits.
Individual research guided by a faculty mentor. A requirement for honors
credit. Enroll Info: Sr st. E A Stds major
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 2013

## E A STDS 698 - DIRECTED STUDY

1-3 credits.
Enroll Info: Jr or Sr st cons inst. 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: Fall 2014

## E A STDS 699 - DIRECTED STUDY

2-3 credits.
Enroll Info: Jr or St st. Graded on a lettered basis; requires cons inst 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 2015

## 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.

## Enroll Info: None

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 2020

## ECON 101 - PRINCIPLES OF MICROECONOMICS

4 credits.
Economic problems of individuals, firms and industries with emphasis on value, price, and distribution of income. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## ECON 109 - STUDY ABROAD IN INTRODUCTORY ECONOMICS <br> 1-4 credits.

Provides an equivalency for introductory level economics courses taken on UW-Madison study abroad programs. Enroll Info: None
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. Enroll Info: None 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 2020

## 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. Enroll Info: None
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

ECON 228 - INTERNSHIP ECONOMICS
1 credit.
Internship in economics related field. Enroll Info: 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: Fall 2020
ECON 299 - DIRECTED STUDY
1-3 credits.
Study of topics at elementary undergraduate level as arranged with a
faculty member. Enroll Info: None
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. Enroll Info: None
Requisites: (ECON 101, 111, or A A E 215) and (ACCT I S 100 or 300 or concurrent enrollment in ACCT I S 100) and (GEN BUS 306, ECON 310, STAT/MATH 309, 431, STAT 224, 301, 302, 309, 311, 324, 371, or
PSYCH 210, or concurrent enrollment); or Business Exchange student
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 2020

## ECON 301 - INTERMEDIATE MICROECONOMIC THEORY

4 credits.
Contemporary theory of consumption, production, pricing and resource allocation. Enroll Info: None
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 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: Fall 2020

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. Enroll Info: None
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: Fall 2020
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, NeoClassical, and Keynesian schools. Enroll Info: None
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 2020
ECON/A A E/REAL EST/URB R PL 306 - THE REAL ESTATE PROCESS 3 credits.

Introductory survey course. Decision-making processes for the manufacture, marketing, management and financing of real estate space. Survey of institutional context, economics of urbanization, historical pattern and structure of city growth, and public policy issues regarding urban environment and business management. Enroll Info: None
Requisites: Sophomore standing and (ECON 101 or 111) or member of 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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020
ECON 311 - INTERMEDIATE MICROECONOMIC THEORY - ADVANCED TREATMENT
3 credits.
A mathematical approach to the theory of consumption, production, pricing and resource allocation. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: FINANCE/ECON 300 and (MATH 213, 222, or 276) and
(GEN BUS 307, ACT SCI 654, ECON 410, STAT/MATH 310, STAT 312, or
333 or concurrent enrollment); or member of 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: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info:

## None

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
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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.

## Enroll Info: None

Requisites: ECON 310
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain-Sustainability
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. Enroll Info: None
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.Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ECON 390 - CONTEMPORARY ECONOMIC ISSUES
3 credits.
Topics vary, including current developments in all fields of economics.

## Enroll Info: None

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: Fall 2020

ECON 400 - INTRODUCTION TO APPLIED ECONOMETRICS
4 credits.
Applied course providing an introduction to 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. Enroll Info: None
Requisites: ECON 310. Not open to students currently 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: Fall 2020

## 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 UWMadison equivalent. Course must be of equal rigor to those offered on campus. To receive this equivalent, departmental pre-approval is required. Enroll Info: None
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. Enroll Info: None
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: Fall 2020
ECON/REAL EST/URB R PL 420 - URBAN AND REGIONAL ECONOMICS 3 credits.

Nature and structure of urban economies; location of economic activity; economic analysis in an urban framework; principles of urban economic development, housing, transportation, poverty and unemployment and municipal finance. Forecasting of economic activity using census and socioeconomic data. Enroll Info: None
Requisites: (ECON 101 or 111) or member of Business Exchange program Course Designation: Breadth - Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: STAT 301, 371, ECON 310, 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2019

## 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.

## Enroll Info: None

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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
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 2016
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. Enroll Info: None
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
Sustain - Sustainability
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. Enroll Info: None
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 2020
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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020
ECON 460 - ECONOMIC FORECASTING
3-4 credits.
Introduction to econometric time series analysis, forecasting methods, and forecast evaluation. The course will cover theoretical, methodological and applied topics, and much of the work will be hands-on data analysis Enroll Info: None
Requisites: ECON 410 or concurrent enrollment; 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 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. Enroll Info: None
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: Fall 2020

## ECON/A A E/INTL BUS 462 - LATIN AMERICAN ECONOMIC <br> 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. Enroll Info: None 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
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 2020

## ECON 467 - INTERNATIONAL INDUSTRIAL ORGANIZATIONS

$3-4$ credits
Study of competition among firms in an international environment (theoretical analysis and policy applications). Topics include: strategic trade, trade agreements and intellectual property rights issues, RD and technology transfers, multinational firms. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## ECON 468 - INDUSTRIAL ORGANIZATION AND IMPERFECT COMPETITION <br> 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. Enroll Info: None
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: Spring 2020
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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: A A E 215 , ECON 101, or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
ECON 502 - ECONOMICS OF TRANSPORTATION
3 credits.
Influence of transport costs on economic development, industrial location and market penetration; economic characteristics of carriers; pricing policies and practices in transport; interrelationship of public policy issues and decisions by suppliers and users of transportation. Enroll Info: None
Requisites: ECON 101, 111, or A A E 215
Course Designation: Breadth - Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None 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 2020
ECON 508 - WEALTH AND INCOME
3 credits.

Origins of inequality in income and wealth -- bequests, human capital, property division, productivity, and demographic change. Primary focus on the United States, with some international comparisons. Measurement of redistribution effected by social insurance, inflation, and tax-transfer systems. Empirical, oriented towards policy analysis and measurement. Enroll Info: None
Requisites: (ECON 301 or 311) and ECON 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: Fall 2013

## 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.
Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2018

## ECON 525 - ECONOMICS OF EDUCATION: THEORY AND MEASUREMENT

 3 credits.Application of theoretical and empirical methods of economics to education policy. Emphasis in econometrics analysis and critical evaluation of empirical research. Writing intensive course. Enroll Info: None
Requisites: (ECON 301 or 311 ) and ECON 410 or concurrent enrollment; 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 2014

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. Enroll Info: None
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 2019
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. Enroll Info: None.
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 2020

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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## 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.
Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ECON/A A E 567 - PUBLIC FINANCE IN LESS DEVELOPED COUNTRIES 3 credits.

Potential and limitations of fiscal policy as a development instrument in low-income countries; tax harmonization in economic integration; case studies in tax reform; budgeting and planning. Enroll Info: Introductory course in economic theory, public finance or economic development recommended.
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 2012
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. Enroll Info: None
Requisites: (ECON 301 or ECON 311) and ECON 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 2020

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. Enroll Info: None
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 2020
ECON 581 - HONORS THESIS
3 credits.
Students will work on their honor thesis. Enroll Info: None
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: Fall 2020
ECON 606 - MATHEMATICAL ECONOMICS II
3-4 credits.
Advanced mathematical topics and techniques used in economic analysis. Deterministic and Stochastic Control Theory emphasized. Enroll Info: None
Requisites: (MATH 234 or 375) and (MATH 320 or 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 2013
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. Enroll Info: None 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

## 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. Enroll Info: None 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2017
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. Enroll Info: None
Requisites: 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.The macroeconomics of open economies (countries that can trade goods and assets with other countries) will be examined in this course. We will take 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. Enroll Info: None
Requisites: ECON 461, 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 2020

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. Enroll Info: None
Requisites: SOC 170, C\&E 357, POP HLTH/C\&E SOC/SOC 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
Sustain - Sustainability
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 firmlevel heterogeneity. Enroll Info: None
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 <br> 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. Enroll Info: None
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ECON 681 - SENIOR HONORS THESIS

3 credits.
Faculty guided honors level original research. Enroll Info: None 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 2020

ECON 682 - SENIOR HONORS THESIS
3 credits.
Faculty guided honors level original research. Enroll Info: None 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 2019

ECON 690 - TOPICS IN ECONOMICS
2-4 credits.
Topics in economic theory and policy. Enroll Info: None
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 2020
ECON 691 - SENIOR THESIS
1-3 credits.
Faculty guided original research. Enroll Info: None
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

## ECON 692 - SENIOR THESIS

1-3 credits.
Faculty guided original research. Enroll Info: None
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
ECON 695 - TOPICS IN ECONOMIC DATA ANALYSIS
3-4 credits.
Various advanced topics on the use of data to answer important economic questions. Enroll Info: None
Requisites: ECON 310 or (STAT 240 and 340)
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
ECON 698 - DIRECTED STUDY
1-4 credits.
Study of topics or research at an advanced undergraduate as arranged with a faculty member. Enroll Info: None
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 2017
ECON 699 - DIRECTED STUDY
1-4 credits.
Study of topics or research at an advanced undergraduate as arranged with a faculty member. Enroll Info: None
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 2020

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. Enroll Info: 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 2020

## 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. Enroll Info: 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 2020
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. Enroll Info: 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 2020
ECON 703 - MATHEMATICAL ECONOMICS I
3-4 credits.
A survey of mathematical techniques used in economic analysis. Linear algebra and optimization techniques are emphasized. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
Requisites: ECON 704
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ECON 706 - ECONOMETRICS III

3 credits.
Focus on using econometric methods to address empirical questions, conduct empirical research, and write empirical papers in economics.
Enroll Info: None
Requisites: ECON 705
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ECON 701
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ECON 709 - ECONOMIC STATISTICS AND ECONOMETRICS I
3-4 credits.
Probability distributions, statistical inference; multiple linear regression; introduction to econometric methods. Enroll Info: 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 2020
ECON 710 - ECONOMIC STATISTICS AND ECONOMETRICS II
$3-4$ credits.
Extensions of the linear regression model; introduction to multiple equation models. Enroll Info: None
Requisites: ECON 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: 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 2020
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. Enroll Info: 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 2020

## 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. Enroll Info: None
Requisites: ECON 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: ECON 712
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ECON 715 - ECONOMETRIC METHODS
3 credits.

Nonlinear econometric theory. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ECON 716 - ECONOMETRIC METHODS

3 credits.
Advanced econometric theory. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ECON 717 - APPLIED ECONOMETRICS
3 credits.
Applied cross section and panel methods. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## ECON 718 - TOPICS IN APPLIED ECONOMETRICS

3 credits.

Applied time series methods. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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.
Enroll Info: None
Requisites: ECON 704
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Declared in an Economics graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ECON/PUB AFFR/URB R PL 734 - REGIONAL ECONOMIC PROBLEM ANALYSIS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

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. Enroll Info: None
Requisites: ECON 709 and 711
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: STAT 609 or STAT/MATH 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: 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
ECON 810 - ADVANCED MACROECONOMIC THEORY 3 credits.

Topics in macroeconomic research. Enroll Info: None
Requisites: 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

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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ECON 873 - SEMINAR-INTERNATIONAL ECONOMICS
2-3 credits.
Individual research and group discussion of selected topics in the theory of international trade. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
ECON 878 - ECONOMIC DEVELOPMENT-THEORY STATISTICS \& POLICY 2-3 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
ECON 899 - RECENT ADVANCES IN ECONOMICS
1-3 credits.
Selections from all fields of economic research. Enroll Info: None
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

## 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. Enroll Info: None
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
ECON 902 - WORKSHOP IN ECONOMIC THEORY
1-7 credits.
Critical discussion of topics in the field of economic theory. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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
ECON 913 - WORKSHOP IN ECONOMETRICS
1-7 credits.
Current research in econometric model building, estimation and inference in econometrics Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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

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. Enroll Info: None
Requisites: 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

## ECON 955 - WORKSHOP IN LABOR ECONOMICS

1-7 credits.
Analysis of current research in wage determination and the functioning of labor markets. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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
ECON/LAW 961 - SELECTED PROBLEMS IN TRADE REGULATION-
SEMINAR
2-3 credits.
Topics reflect interests of instructor and students. Enroll Info: None 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 <br> 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. Enroll Info: None
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

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. Enroll Info: None
Requisites: 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
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: 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

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. Enroll Info: None 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

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. Enroll Info: None
Requisites: 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

ECON/AFRICAN/ANTHRO/GEOG/HISTORY/POLI SCI 983 INTERDEPARTMENTAL SEMINAR-AFRICAN STUDIES
3 credits.
Interdisciplinary inquiry in African society and culture. Enroll Info: None 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
ECON 990 - THESIS
2-9 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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
ECON 999 - INDEPENDENT WORK
2-9 credits
Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## EDUCATION POLICY STUDIES (ED POL)

## ED POL/HISTORY 107 - THE HISTORY OF THE UNIVERSITY IN THE

 WEST3 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. Enroll Info: None
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 2020
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.
Enroll Info: None
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: Summer 2020
ED POL 145 - INTRODUCTION TO EDUCATION POLICY 3 credits.

Examines education policy debates, policy processes, and school governance with attention to the multiple and sometimes conflicting goals that animate education debates; discourses and representations of schools, teachers and students that shape policy and politics; research on education and education policy outcomes and implementation; and key lenses and conceptual tools that can help us understand education policy. Course materials include original policy texts, empirical and conceptual research, and film. While the focus is on $K-12$ education in the United States, students will have the opportunity to consider early childhood education and higher education as well education in historical and global contexts. Enroll Info: None
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

## 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. Enroll Info: None

## 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 2020
ED POL 200 - RACE, ETHNICITY, AND INEQUALITY IN AMERICAN EDUCATION
3 credits.
Theories and research concerning the reasons for racial and ethnic differences in educational performance; the significance of contemporary and historical debates over educational inequality; policies and practices to reduce inequality in education. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Fall 2020
ED POL 202 - EDUCATION AT WORK
3 credits.
Explores the meaning and value of an education major for careers in education in the contemporary workplace. Through a series of individual and collaborative research and communication assignments, learn to critically analyze careers in the field of education and to reflect on personal strengths and values in preparation to connect college work with lifelong career success. Enroll Info: None
Requisites: Satisfied Communications A requirement
Course Designation: Gen Ed-Communication Part B
Repeatable for Credit: No

ED POL 210 - YOUTH, EDUCATION, AND SOCIETY 3 credits.

The purpose of this course is to explore the study of youth through theoretical, historical, social, and cultural perspectives. This class will interrogate the concept of "youth" as a socially constructed category and examine how "youth" have been positioned within educational, political, economic, and social contexts. Themes explored include: 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. By drawing on a variety of historical and contemporary "texts" and current events we will study the lived realities of youth who are situated within diverse racial, cultural, gendered, and classed contexts. Throughout the course, students will be able to reflect on their own experiences as 'youth,' their relationship to education and other social institutions - and how it informs their understanding of society, educational theory and practice. Enroll Info: None
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 2020

## 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 inquires in educational case studies, including: educational inequality; victims of the war on drugs; working children's rights; and climate change. Enroll Info: None
Requisites: None
Course Designation: Breadth - Either Humanities or Social Science Level - Elementary
\&\& Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

ED POL 260 - INTRODUCTION TO INTERNATIONAL EDUCATION DEVELOPMENT
3 credits.
Examines theories, institutions, and issues in international educational development. Enroll Info: None
Requisites: None
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
ED POL 274 - EDUCATION STUDIES--STUDY ABROAD/GLOBAL EDUCATION

1-3 credits.

Topics vary reflecting the specializations, expertise, and curricula of study-abroad programs. Enroll Info: None
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. Enroll Info: None 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 2020

## 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 contextsensitive, 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. Enroll Info: None 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 2020
ED POL 399 - INDEPENDENT READING
1-3 credits.
Enroll Info: None
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

## 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. Enroll Info: None
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
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. Enroll Info: None
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: Summer 2015

## 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. Enroll Info: None
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 2016

## ED POL/HISTORY 478 - COMPARATIVE HISTORY OF CHILDHOOD AND ADOLESCENCE <br> 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. Enroll Info: None
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 2020
ED POL 500 - TOPICS ON SOCIAL ISSUES AND EDUCATION
3 credits.
Contemporary social issues or problems and their significance for educational purposes and practices. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020
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. Enroll Info: None
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 2019

ED POL 510 - URBAN SCHOOL POLICY
3 credits.
This course examines urban school problems, politics, and policies in the United States. Among the issues we will consider are: the framing of K -12 urban schools; the social, economic and political factors shaping urban schools and school policy; frameworks for explaining urban school policy; goals for school reform; and contemporary policy proposals for urban school systems. The focus is on system-level educational problems, politics, and policies, though we will give some attention to schools and classrooms. Enroll Info: Junior standing or 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: Fall 2019
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. Enroll Info: None
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

## ED POL 518 - INTRODUCTION TO DEBATES IN HIGHER EDUCATION

 POLICY3 credits.
Critical examination of debates surrounding contemporary higher education policies; emphasis on those policies affecting college access and success. Enroll Info: Jr, Sr, or Grad st
Requisites: None
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
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. Enroll Info: None
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 2016

ED POL/PHILOS 550 - PHILOSOPHY OF MORAL EDUCATION 3 credits.

Critical examination of classical and contemporary conceptions of moral education. Enroll Info: None
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 2011
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. Enroll Info: None
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 2020

## ED POL/AFROAMER 567 - HISTORY OF AFRICAN AMERICAN EDUCATION <br> 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. Enroll Info: None
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 2015

## 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. Enroll Info: None
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 2020

## ED POL 575 - EDUCATION POLICY AND PRACTICE

3 credits.
Examines the relationship between formal and informal policies and teachers' and administrators' practice. This will include attention to: (1) research on the teaching occupation and teachers' work, (2) policy implementation frameworks, and (3) other socio-cultural and political approaches to understanding the relationship between policy and educational practice. We will consider the multiple influences on educational practice (e.g. individual proclivities, relations between levels of government, organizational and political factors, discourses, resources, etc.) and a variety of conceptual/theoretical and methodological approaches. Teachers and administrators are viewed as implementers, appropriators, and creators of policy. Furthermore, we examine how practice shapes policy. Enroll Info: None
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: Fall 2020

## ED POL 595 - LANGUAGE POLITICS, ETHNICITY, 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. Enroll Info: None
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

ED POL 600 - PROBLEMS IN EDUCATIONAL POLICY
1-3 credits.
Policy area and faculty vary each semester. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## ED POL/HISTORY 622 - HISTORY OF RADICAL AND EXPERIMENTAL EDUCATION IN THE US AND UK <br> 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. Enroll Info: None
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 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. Enroll Info: None
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

## ED POL/HISTORY 665 - HISTORY OF THE FEDERAL ROLE IN AMERICAN EDUCATION <br> 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.). Enroll Info: None
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 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. Enroll Info: None
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
ED POL/CURRIC 677 - EDUCATION, HEALTH AND SEXUALITY: GLOBAL PERSPECTIVE AND POLICIES
3 credits.
Employs a lifecycle approach to examine the issues at the intersection of education and health that people face throughout the world, but especially in poor countries. Particular attention is placed on sexuality education, reproductive health, and infectious disease epidemics. Enroll Info: None
Requisites: None
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2013

ED POL 699 - INDEPENDENT READING
1-3 credits.

## Enroll Info: None

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: Summer 2020

## ED POL 701 - INTRODUCTION TO EDUCATIONAL POLICY STUDIES

 3 credits.An introduction to diverse scholarly perspectives in educational policy studies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED POL/AFROAMER/HISTORY 712 - EDUCATION AND THE CIVIL RIGHTS MOVEMENT <br> 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. Enroll Info: None
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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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: communitybased learning experiences and classroom reflection. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
ED POL 723 - 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? The class aims to push our 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, and social movements. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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 polities, 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? Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No

## ED POL 725 - PARTICIPATORY ACTION RESEARCH AND PROGRAMMING

 3 credits.Critically analyze and utilize a toolkit of participatory informationgathering 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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 $\mathrm{im} /$ 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2019
ED POL 780 - SPECIAL TOPICS IN EDUCATIONAL POLICY STUDIES 3 credits.

Topics vary each semester. Enroll Info: None
Requisites: 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 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. Enroll Info: None
Requisites: RP \& 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: Summer 2020

## 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. Enroll Info: None
Requisites: RP \& 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 2020
ED POL/ELPA/PUB AFFR 795 - ECONOMICS OF EDUCATION 3 credits.

Shows how basic economic concepts are applied to the study of education policy and what economic research has concluded about the efficiency of various types of education systems. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
ED POL/HISTORY 906 - PROSEMINAR ON THE HISTORY OF EDUCATION
1-3 credits.
Reading in European or American educational history. Enroll Info: None Requisites: 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 POL/HISTORY 907 - SEMINAR-HISTORY OF EDUCATION

1-3 credits.
Studies in European and American educational history. Enroll Info: None 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
ED POL/SOC 908 - SEMINAR-SOCIOLOGY OF EDUCATION
3 credits.
Selected topics. Enroll Info: None
Requisites: 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 911 - SEMINAR IN URBAN EDUCATION
2-3 credits.
Historical and contemporary urban education. Emphasis: preparation of graduate students to conduct research in problems of minority groups, and family influences on children. Open to graduate students in other disciplines and specialties which relate to the schools' program in urban centers. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
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
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.

## Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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 POL 990 - RESEARCH OR THESIS
1-12 credits.
Enroll Info: None
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
ED POL 999 - INDEPENDENT READING
1-3 credits.
Enroll Info: None
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

## EDUCATIONAL LEADERSHIP AND POLICY ANALYSIS (ELPA)

## ELPA/COUN PSY 350 - PEER LEADERSHIP AND MENTORSHIP WITH

 TRANSITIONING STUDENTS1 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. Enroll Info: None
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 <br> 1-3 credits.

Practical problems derived from student interests and needs. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
ELPA/INTER-HE 660 - FOUNDATIONS OF EDUCATION FOR WORK 2-3 credits.

Analysis of perspectives and issues associated with the development of work-focused education policies and practice. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: No
Last Taught: Fall 2013
ELPA/INTER-HE 661 - ORGANIZATION AND OPERATION OF EDUCATION FOR WORK PROGRAMS
3 credits.
Procedures, policies and research associated with various systems of work-related education. This course is intended for students who have teaching experience. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: No
Last Taught: Spring 2014
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ELPA 702 - INTRODUCTION TO EDUCATIONAL LEADERSHIP 3 credits.

Integration of research, theory, and standards of practice for effective leadership in contemporary educational organizations. Enroll Info: None
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

 TEACHING3 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
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 719 INTRODUCTION TO QUALITATIVE RESEARCH <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None 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

## ELPA 736 - ADMINISTRATION OF STUDENT SERVICES IN HIGHER EDUCATION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ELPA/INTER-HE 742 - FACILITATING LEARNING FOR ADULTS 3 credits.

Analysis of concepts and procedures for helping adults learn. Emphasis on the teaching-learning transactions that encourage and assist adults in their learning activities. Enroll Info: None
Requisites: ELPA/CURRIC 746
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
ELPA/CURRIC 748 - PROSEMINAR: ISSUES \& PROBLEMS IN TEACHING-LEARNING IN ADULT EDUC
3 credits.
A planned, systematic analysis of basic issues; instructional group strategies, instructional modes, independent learning, etc. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013

## ELPA/ED POL/PUB AFFR 765 - ISSUES IN EDUCATIONAL POLICY ANALYSIS <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ELPA 777 - HIGHER AND POST-SECONDARY EDUCATION CAPSTONE SEMINAR <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 785 - STAFF PERSONNEL SYSTEMS IN EDUCATION 3 credits.

Personnel systems and collective bargaining processes for professional and nonprofessional staff in education including elementary, secondary, higher and post-secondary education. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info:

## None

Requisites: RP \& 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: Summer 2020

## 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. Enroll Info: None
Requisites: RP \& 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 2020
ELPA/ED POL/PUB AFFR 795 - ECONOMICS OF EDUCATION
3 credits.
Shows how basic economic concepts are applied to the study of education policy and what economic research has concluded about the efficiency of various types of education systems. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ELPA 824 - FIELD RESEARCH DESIGNS \& METHODOLOGIES IN EDUCATIONAL ADMINISTRATN <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ELPA/INTER-HE 826 - EVALUATION FOR ADMINISTRATIVE DECISION MAKING IN EDUCATION <br> 3 credits

Theory and methods of evaluation for administrators. Models and techniques related to educational needs assessment, program and product development, formative and summative evaluation. Use of evaluative information for administrative decision making and administration of educational evaluation projects. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## ELPA/ED PSYCH 827 - SURVEYS AND OTHER QUANTITATIVE DATA COLLECTION STRATEGIES <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: ELPA 735
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ELPA 848 - PROFESSIONAL DEVELOPMENT AND ORGANIZATIONAL

## LEARNING

3 credits.
Examines educators' professional learning in organizations and its contributions to organizational change, learning, and renewal. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ELPA 715
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ELPA 881 - IDEAS OF THE UNIVERSITY: IMAGES OF HIGHER LEARNING FOR THE 21ST CENTURY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: ELPA 701
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ELPA 890 - APPLIED RESEARCH IN EDUCATIONAL ADMINISTRATION 3 credits.

Supervised research on topics in the administration of elementary and secondary education. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## ELPA 900 - INTERNSHIP IN EDUCATIONAL ADMINISTRATION

3 credits.

In administration and other leadership positions in elementary and secondary, vocational, technical, and adult, and higher educational systems or other educational agencies. Enroll Info: Post-master st, approp advanced cr cons inst
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

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. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ELPA 915 - SEMINAR: COLLEGE AND UNIVERSITY ADMINISTRATION 3 credits.

Research and discussion on topics in college and university administration. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: None
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
ELPA 960 - SEMINAR IN EDUCATIONAL FINANCE
3 credits.

Problems of financing education; school financial management; and related research. Enroll Info: None
Requisites: ELPA 832
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ELPA/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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.
Enroll Info: None
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

## ELPA 999 - INDEPENDENT READING

1-3 credits.
Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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. Enroll Info: None 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 2020

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. Enroll Info: None
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 2020
ED PSYCH 321 - HUMAN DEVELOPMENT IN ADOLESCENCE
2-3 credits.
Physiological, social, and cognitive changes which characterize the transition from childhood to adult life. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 470 - RESEARCH EXPERIENCE IN EDUCATIONAL PSYCHOLOGY <br> 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. Enroll Info: None
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

## 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. Enroll Info: None 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## ED PSYCH 521 - ADOLESCENT DEVELOPMENT IN EDUCATIONAL CONTEXTS

3 credits.
Normative patterns of physical, mental, social, moral, and psychological development during adolescence, with special emphasis on influences of educational settings and implications for schooling. Individual differences in adolescent development resulting from family and cultural background, personal characteristics, and historical events. Enroll Info:

## None

Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## ED PSYCH 525 - LEARNING ANALYTICS THEORY AND PRACTICE

 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 540 - INTRODUCTION TO PROFESSIONAL SCHOOL PSYCHOLOGY <br> 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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 phylogenic neurodevelopment. Provides an overview of ethical/cultural implications of these scientific advances. Ethical/Cultural/Economic Applications.

## Enroll Info: None

Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 551 - QUANTITATIVE ETHNOGRAPHY

3 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. Enroll Info: None
Requisites: ED PSYCH 301 or graduate standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 21 st century learning environments and learning 21 st century skills. Enroll Info: None
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. Enroll Info: None
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 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None
Requisites: Declared in Curriculum and Instruction MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ED PSYCH 622 - STRUCTURING SECONDARY SCHOOLS FOR ADOLESCENT DEVELOPMENT
1 credit.
Designing instructional environments and learning activities to foster healthy adolescent development. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: 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 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. Enroll Info: None
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 632 - PRACTICUM IN SUPERVISION OF SCHOOL

 PERSONNEL1 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. Enroll Info: None
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 2020

## ED PSYCH 633 - PROACTIVELY ADDRESSING STUDENTS' EMOTIONAL AND BEHAVIORAL NEEDS

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). Enroll Info: None 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 2020

## 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. Enroll Info: None Requisites: Declared in MS Educational Psychology. Professional Education (MSPE) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## ED PSYCH 641 - ORGANIZATIONAL CHANGE AND INSTRUCTIONAL COACHING <br> 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. Enroll Info: None
Requisites: ED PSYCH 640
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: ED PSYCH 641
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: ED PSYCH 642
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## ED PSYCH 695 - CAPSTONE IN LEARNING ANALYTICS

## 6 credits.

Introduces guest speakers who specialize in applying learning analytics in a variety of professional environments and to a variety of timesensitive 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## ED PSYCH 699 - INDEPENDENT READING UNDERGRAD

1-6 credits.
Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: ED PSYCH 709
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 711 - CURRENT TOPICS IN EDUCATIONAL PSYCHOLOGY

1-3 credits.

Current issues in educational psychology. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Declared in Educational Psychology graduate program Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ED PSYCH 715 - PRACTICUM FOR TEACHERS OF THE GIFTED AND TALENTED
3 credits.
Planning and conducting learning experiences for gifted students. Enroll Info: None
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 2013

## ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP \& SE 719 INTRODUCTION TO QUALITATIVE RESEARCH <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ED PSYCH 721 - ADOLESCENT DEVELOPMENT
3 credits.
Individual differences in and contextual influences on physical, cognitive, social, and personality development. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 731 - LABORATORY IN DEVELOPMENTAL RESEARCH

 3 credits.Emphasis on developing skills necessary for researchers in human development, observational techniques, experimental methods in infant and child research, design of lab equipments, research design for developmental problems. Enroll Info: None
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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: ED PSYCH 760
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: ED PSYCH 740
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 742 - ASSESSMENT AND INTERVENTION FOR ACADEMIC

 SKILL PROBLEMS3 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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 745 - DESIGNING AND MANAGING THE LEARNING ENVIRONMENT <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

ED PSYCH 761 - STATISTICAL METHODS APPLIED TO EDUCATION II 3 credits.

Analysis of variance and covariance, multiple linear regression; chisquare and various nonparametric techniques. Enroll Info: None Requisites: ED PSYCH 760
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 762 - INTRODUCTION TO THE DESIGN OF EDUCATIONAL EXPERIMENTS <br> 3 credits.

Classical experimental designs and their application to educational research, factorial treatment arrangements, confounding, repeated measures design, and related topics. Enroll Info: None
Requisites: ED PSYCH 761
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ED PSYCH 761
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH/COMP SCI/PSYCH 770 - HUMAN-COMPUTER INTERACTION

 3 credits.Principles of human-computer interaction ( HCl ); human subjects research methods and procedures, qualitative and quantitative data analysis; and semester-long research project situated in critical domains of HCl , including applications in ubiquitous, affective, assistive, social, and embodied computing. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: ED PSYCH 760
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ED PSYCH 761
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
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. Enroll Info:

## None

Requisites: RP \& 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: Summer 2020

## 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. Enroll Info: None Requisites: RP \& 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 2020

## ED PSYCH 791 - MASTER OF SCIENCE FOR PROFESSIONAL EDUCATORS CAPSTONE <br> 1 credit.

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. Enroll Info: None
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 2018

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 796 - INTRODUCTION TO THE LEARNING SCIENCES II

3 credits.
Principles of learning emphasizing higher order cognitive and social processes. Enroll Info: None
Requisites: ED PSYCH 795
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH/CURRIC/LIS 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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ED PSYCH/ELPA 822 - INTRODUCTION TO QUANTITATIVE INQUIRY IN EDUCATION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH/ELPA 827 - SURVEYS AND OTHER QUANTITATIVE DATA COLLECTION STRATEGIES <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 840 - CLINICAL PRACTICUM IN SCHOOL PSYCHOLOGY

 1-6 credits.Applied experience in comprehensive psychological and educational evaluation procedures with children, parent interviewing, school consultation; remedial therapeutic, and counseling techniques with children and parents; practicum experience individually determined by student's prior training and course work. Enroll Info: None
Requisites: ED PSYCH 741
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## ED PSYCH/ED POL/ELPA/RP \& SE 842 - LEGAL FOUNDATIONS OF SPECIAL EDUCATION AND PUPIL SERVICES <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 844 - CHILDHOOD AND ADOLESCENT PSYCHOPATHOLOGY IN SCHOOLS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ED PSYCH 861 - STATISTICAL ANALYSIS AND DESIGN IN EDUCATIONAL RESEARCH

3 credits.
A non-parametric perspective of classical experimental designs and their application to educational research, factorial treatment arrangements, repeated measures designs, and related topics. Enroll Info: None
Requisites: ED PSYCH 760
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 920 - SEMINAR IN CHILD DEVELOPMENT

2-3 credits

Covers topics in the social, emotional, and cognitive development of children. Investigations of the relations between development, learning, and behavior in educational contexts. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## 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. Enroll Info: None
Requisites: 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. Enroll Info: None
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

## ED PSYCH 942 - SYSTEMS OF CONSULTATION IN SCHOOL

 PSYCHOLOGY2-3 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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
ED PSYCH/COUN PSY/RP \& SE 944 - INTERNSHIP PREPARATION 1 credit.

Prepare for internship by providing resources, guidelines, and support in selecting and applying to internship sites. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

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, metaanalysis and utilization. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: 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 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 948 - RESEARCH AND MEASUREMENT SEMINAR IN SCHOOL PSYCHOLOGY <br> 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. Enroll Info: None
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

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. Enroll Info: None
Requisites: ED PSYCH 763
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ED PSYCH 961 - SEMINAR-STATISTICS AND RESEARCH DESIGN
3 credits.
Enroll Info: None
Requisites: 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 <br> 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. Enroll Info: None
Requisites: ED PSYCH 762 and 763
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ED PSYCH/ELPA 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. Enroll Info: None
Requisites: ED PSYCH 760 \& 761
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ED PSYCH 965 - APPLIED BAYESIAN STATISTICS FOR EDUCATION RESEARCH <br> 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. Enroll Info: None
Requisites: ED PSYCH 763
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ED PSYCH 971 - ADVANCED SEMINAR IN EDUCATIONAL MEASUREMENT AND STATISTICS <br> 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. Enroll Info: None
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.
Enroll Info: None
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
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. Enroll Info: None
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

ED PSYCH 999 - INDEPENDENT READING
1-3 credits.
Enroll Info: None
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

## ELECTRICAL AND COMPUTER ENGINEERING (E C E)

## ECE1-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. Enroll Info: None
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: Fall 2020
E C E 203 - SIGNALS, INFORMATION, AND COMPUTATION
3 credits.
Introduction to the signals, information, and computational techniques in electrical engineering. Enroll Info: None
Requisites: (MATH 211, 217, 221, or 275) or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 112, 114, 117, or member of Engineering Guest
Students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## ECE 219 - ANALYTICAL METHODS FOR ELECTROMAGNETICS ENGINEERING

1 credit.
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 and/or time-frequency analysis. Applies analysis tools from vector calculus and complex exponentials to the calculation and prediction of electrical system properties. Examples include calculating electric and magnetic fields, electric potentials, or electric flux from change or current sources, and calculating the amplitudes and phases of electric or magnetic fields due to time-oscillating sources. Enroll Info: None
Requisites: MATH 234 or 376, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## ECE 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. Enroll Info: None
Requisites: (PHYSICS 202, 208, or 248) and E C E 219, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## ECE 230 - CIRCUIT ANALYSIS

4 credits.
Kirchhoff's laws, resistive circuits, equivalent circuits using TheveninNorton 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. Enroll Info: None
Requisites: (MATH 222 or 276) and (PHYSICS 202, 208, or 248), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## E C E/COMP SCI 252 - INTRODUCTION TO COMPUTER ENGINEERING

 2 credits.Logic components built with transistors, rudimentary Boolean algebra, basic combinational logic design, basic synchronous sequential logic design, basic computer organization and design, introductory machineand assembly-language programming. Enroll Info: None
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 2020
ECE 270 - CIRCUITS LABORATORY I
1 credit.
Experiments cover Kirchhoff's laws, inductors, basic operational amplifier circuits, and frequency response. Enroll Info: None
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: Fall 2020

## ECE 271 - CIRCUITS LABORATORY II

1 credit.
Experiments cover electronic device characteristics, limitations and applications of operational amplifiers, and feedback circuits. Enroll Info:

## None

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: Fall 2020
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 precessor using an Integrated Development Environment. Lab hardware will be provided. Enroll Info: None
Requisites: E C E 203 or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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.

## Enroll Info: None

Requisites: (E C E 355, 356, or concurrent enrollment) or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: EC E 271 and (E C E 335 or concurrent enrollment), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## ECE 306 - LINEAR ACTIVE CIRCUITS LABORATORY

1 credit.
Direct coupled and operational amplifier characteristics; applications of feedback; practical aspects. Enroll Info: None
Requisites: EC E 271 and 340, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2018

## ECE 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. Enroll Info: None
Requisites: EC 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. Enroll Info:

## None

Requisites: E C E 271 and 340, or member of Engineering Guest Students Repeatable for Credit: No
Last Taught: Fall 2020

## ECE 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. Enroll Info: None Requisites: EC E 353 or concurrent enrollment, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## ECE 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: E C E 220 or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: E C E 203 or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
ECE 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. Enroll Info: None
Requisites: (E C E 203 or 330) or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## ECE 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. Enroll Info: None
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 statevariable differential equations. Additional topics include stability, controllability, observability, state feedback, observers, and dynamic output feedback. Enroll Info: None
Requisites: MATH 320, 340, 341, or 376, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2017
ECE 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. Enroll Info: None
Requisites: (E C E 220, 230, and PHYSICS/E C E 235), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: (E C E 203 and 230) or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
ECE 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. Enroll Info: None
Requisites: E C E 340 or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR) A requirement and ECE/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: Fall 2020

## 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. Enroll Info: None
Requisites: 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: Fall 2020

## 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. Enroll Info: None
Requisites: 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: Fall 2020

## 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. Enroll Info: None
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: Summer 2020

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. Enroll Info:

## None

Requisites: (E C E 230 or 376) or member of Engineering Guest Students
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 370 - ADVANCED LABORATORY

2 credits.
Experiments related to the required core material. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: (MATH 222 or 276) and (PHYSICS 202, 208, or 248), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 377 - FUNDAMENTALS OF ELECTRICAL AND ELECTROMECHANICAL 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. Enroll Info: None
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 2020
ECE 379 - SPECIAL TOPICS IN ELECTRICAL AND COMPUTER ENGINEERING
1-4 credits.
Topics of special interest to undergrads in electrical and computer engineering. Enroll Info: None
Requisites: Sophomore standing or member of Engineering Guest
Students
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

E C E 399 - INDEPENDENT STUDY
1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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 2020

## ECE 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. Enroll Info: None
Requisites: E C E 203, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## ECE411-INTRODUCTION TO ELECTRIC DRIVE SYSTEMS <br> 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. Enroll Info: None
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 2020
ECE 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: EC E 330, graduate/professional standing, or member of Engineering Guest Students
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ECE 431 - DIGITAL SIGNAL PROCESSING
3 credits.
Sampling continuous-time signals and reconstruction of continuoustime 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. Enroll Info: None
Requisites: EC E 330, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 432 - DIGITAL SIGNAL PROCESSING LABORATORY

3 credits.
Implementation of digital signal processing algorithms on specialpurpose 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. Enroll Info: None
Requisites: EC 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 2020

## ECE 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. Enroll Info: None
Requisites: 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 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: (E C E 203 or 330), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (E C E 203 or 330), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None Requisites: Senior standing or member of Engineering Guest Students Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 445 - SEMICONDUCTOR PHYSICS AND DEVICES

3 credits.
Physics and properties of semiconductors, p-n junctions, metalsemiconductor 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020
ECE 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. Enroll Info: None
Requisites: ECE 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 2020

## 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. Enroll Info: None
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: Fall 2020

## ECE/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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: E C E 330 and (COMP SCI 200, 220, 300, or 301), 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

## ECE 466 - ELECTRONICS OF SOLIDS

3 credits.
Electronic, optical and thermal properties of crystalline solids. Energymomentum 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. Enroll Info: None
Requisites: (E C E 305 or 335), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2012

## E C E 489 - HONORS IN RESEARCH

1-3 credits.
Undergraduate honors research projects supervised by faculty members.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## E C E 491 - SENIOR DESIGN PROJECT

3 credits.
Engineering design projects supervised by faculty members. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Summer 2020
ECE 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. Enroll Info: None
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. Enroll Info:

## None

Requisites: (COMP SCI 367 or 400 ) and (COMP SCI 407, 536, 537, 545, $559,564,570,679$ or 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: Fall 2020
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. Enroll Info: None
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 2016

## ECE 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. Enroll Info: None
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 2019

## E C E/COMP SCI/I SY 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. Enroll Info: None
Requisites: (COMP SCI 200, 220, 300, 301, 302, or 310) 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: Fall 2020
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 processing plasmas. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: EC 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## EC 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. Enroll Info: None
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 2019
E C E/COMP SCI/M E 532 - MATRIX METHODS IN MACHINE LEARNING 3 credits.

Introduction to machine learning that focuses on matrix methods and features real-world applications ranging 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. Enroll Info: None Requisites: (MATH 222 or 276) and (E C E 203, COMP SCI 200, 220, 300, $301,302,310$, or 320 ), or 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: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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 mapdeep 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. Enroll Info: None
Requisites: COMP SCI 200, 220, 300, 301, 302, or 310 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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info:

## None

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. Enroll Info: None
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 2014
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. Enroll Info: None 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, Sparameter techniques for r.f. active circuit design, computer aided design techniques, r.f. integrated circuits, fundamentals of low noise r.f. design. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: E C E 335, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
ECE 549 - INTEGRATED CIRCUIT FABRICATION LABORATORY
3 credits.
Monolithic integrated circuit fabrication; mask making, photolithography, oxidation, diffusion, junction evaluation, metallization, packaging, and testing. Enroll Info: None
Requisites: (E C E 335 or 548), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None Requisites: ECE/COMP SCI 352, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (E C E/COMP SCI 352 and 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: Fall 2020

## 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. Enroll Info: None
Requisites: 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 2014

## ECE 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. Enroll Info: None
Requisites: ECE 551 and EC 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 2020

## 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. Enroll Info: None
Requisites: (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 2020

## E C E 556 - DESIGN AUTOMATION OF DIGITAL SYSTEMS

3 credits.
Use of digital computers to simulate, partition, place and interconnect digital electronic systems. Enroll Info: None
Requisites: 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 2020

## 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. Mathematical topics include Bayesian probability and statistics, random vectors, categorical random variables, entropy, mutual information, and source coding. Machine Learning topics include Bayes classification, Naive Bayes, generative modeling, decision trees and random forests, maximum likelihood estimation, principal component analysis, stochastic gradient methods, empirical risk minimization, entropy minimization, dimensionality reduction with random projections, and variational autoencoders. Previous exposure to numerical computing (e.g. Matlab, Python, Julia, R) required. Enroll Info: None

Requisites: (MATH 320, 340, 341, 375, or M E/COMP SCI/E C E 532 or concurrent enrollment) and (E C E 331, STAT/MATH 309, 431, STAT 311, 324, 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

## 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. Enroll Info: None
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. Enroll Info: None Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2016

ECE 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. Enroll Info: None
Requisites: Junior standing or member of Engineering Guest Students Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 611 - INTRODUCTION TO DOCTORAL RESEARCH IN ELECTRICAL \& COMPUTER ENGINEERING <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ECE 630 - ALL OF SIGNAL PROCESSING
3 credits.
A broad range of basic and advanced signal processing concepts presented in a MATLAB intensive, application driven environment designed to acquaint students with the fundamental ideas and language of signal processing. Enroll Info: Knowledge of calculus and analytic geometry [such as MATH 222 or 276] and introductory statistics [such as STAT 311, 324, or 371] strongly encouraged.
Requisites: 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 2014

ECE/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. Enroll Info: None
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

## E C E 697 - CAPSTONE PROJECT IN MACHINE LEARNING AND SIGNAL

 PROCESSING5 credits.
Individual or team project to gain hands-on-experience applying signal processing and machine learning concepts. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## E C E 699 - ADVANCED INDEPENDENT STUDY

## 1-6 credits.

Directed study projects as arranged with instructor. Enroll Info: None
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 2020
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
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-toAC, and AC-to-AC converters, commutation techniques, converter control, interfacing converters with real sources and loads. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None 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 2020

## ECE 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. Enroll Info: 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 2020

## 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. Enroll Info: 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. Enroll Info: 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 2020

## 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. Enroll Info: 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 2020

## 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. Enroll Info: 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 2019

## 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. Enroll Info: Basic knowledge of plasmas [such as PHYSICS/ ECE/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 2020

## 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. Enroll Info: 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: Fall 2019

## 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. Enroll Info: Knowledge of basic probability analysis [such as ECE 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 2020

## ECE 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. Enroll Info: None
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: Spring 2019

## ECE 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. Enroll Info: 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 2020

## 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. Enroll Info: None
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 spreadspectrum (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. Enroll Info: 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 2016

## 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. Enroll Info: 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 2020
ECE/M E 739 - ADVANCED ROBOTICS
3 credits.
In-depth study of robotics modeling and control. Topics include kinematics, motion planning, dynamics and control of serial chain robotic manipulators. Concepts are explored through a combination of theoretical and numerical modeling techniques. Knowledge of highlevel computational programming language such as MATLAB strongly encouraged. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ECE 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. Enroll Info: 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 2020

## 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. Enroll Info: 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 and E C E 536
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: 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 2020

## E C E 743 - HIGH-POWER DIODE LASERS AND AMPLIFIERS

3 credits.

Single-mode diode lasers and amplifiers and their applications; an indepth 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. Enroll Info: 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 and E C E 536
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. Enroll Info: 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 2019

## ECE 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. Enroll Info: None

## Requisites: Graduate/professional standing

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: 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: Fall 2011

## 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. Enroll Info: 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 2020

## 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; inhomogenous media; random media. Lagrangian and Hamiltonian formulations; asymptotic methods. Enroll Info: 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 2017

## 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. Enroll Info: None
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) Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## ECE 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. Enroll Info: 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 2020

## 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). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: 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 2014

## 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. Enroll Info: None
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/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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). Enroll Info: None
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/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. Enroll Info: None
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/COMP SCI 761 - MATHEMATICAL FOUNDATIONS OF MACHINE LEARNING <br> 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). Enroll Info: None

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/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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 790 - MASTER'S RESEARCH

1-9 credits.
Independent work on master's research overseen by a qualified instructor. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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 2020
ECE 821 - OPTIMAL CONTROL AND VARIATIONAL METHODS 3 credits.

Variational methods in optimal control, functional analytic and vector space tools, time-optimal control and reachable sets, the Pontryagin Maximum Principle, linear quadratic regulators, stability of optimized systems, introduction to H-infinity control. Enroll Info: 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 2013
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 aposteriori detection; adaptive receivers for channels with unknown parameters or dispersive, fading characteristics; the RAKE receiver; detection systems with learning features. Enroll Info: None
Requisites: E C E 730
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

ECE 841 - ELECTROMAGNETIC RADIATION AND TRANSMISSION 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. Enroll Info: None
Requisites: E C E 740
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## EC E/MATH 842 - TOPICS IN APPLIED ALGEBRA

3 credits.
Applied topics with emhasis 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). Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info:

## None

Requisites: E C E 745
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: 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. Enroll Info: None
Requisites: EC E/COMP SCI 761 or EC E 830
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## E C E 890 - PRE-DISSERTATOR'S RESEARCH

1-9 credits.
Independent work on doctoral research overseen by a qualified instructor. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: 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

## E C E/N E/PHYSICS 922 - SEMINAR IN PLASMA PHYSICS

0-1 credits.
Current topics in plasma physics. Enroll Info: None
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

## E C E 990 - DISSERTATOR'S RESEARCH

1-12 credits.
Independent work on dissertation overseen by a qualified instructor.

## Enroll Info: None

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: Fall 2020

## E C E 999 - ADVANCED INDEPENDENT STUDY

1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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

## EMERGENCY MEDICINE (EMER MED)

EMER MED 699 - INDEPENDENT STUDY
1-3 credits.
This directed study in emergency medicine will offer students majoring in related fields an opportunity to participate in basic emergency medicine research. This course will assist in the preparation for graduate or medical school coursework. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 Spanishlanguage skills. Exceptions to these requirements will be considered on a case-by-case basis by Clerkship Director. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 918 - THORACOABDOMINAL ANATOMY AND SONOGRAPHY IN TRAUMA

2 credits.
Traumatically injured patients require rapid evaluation to assess for lifethreatening injuries. Point of care ultrasound is the practice of clinicians performing and interpreting focused real time ultrasound exams at the patient's bedside, then immediately applying ultrasound findings to guide clinical management or dangerous procedures. Students will learn skills necessary to perform point of care ultrasound, especially for the traumatically injured patients. We will use a multi-modal approach to highlight the clinical relevance and sonographic features of anatomical structures, review pertinent anatomy in the chest and abdomen, and then re-approach these structures by using ultrasound in trauma patients in the Emergency Department. Enroll Info: None
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 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. Enroll Info: None
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 2020

## EMER MED 925 - MEDICINE \& HORSEMANSHIP

1 credit.
Help medical students develop awareness of the subtleties of selfpresentation and communication that are necessary for the physicianpatient relationship and other professional interactions. These relationships are based on the student's interpersonal behaviors as much as on the factual clinical information that he or she brings to the therapeutic transaction. Because medical schools often select for intellectual proficiency over other forms of intelligence, even medical students with premedical clinical and community experience have often not developed the people skills required for clinical excellence. Students will have the opportunity to develop these skills working closely with horses and handlers. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## EMER MED 998 - INDEPENDENT STUDY

1-8 credits.
Offers MD students interested in emergency medicine, an opportunity to participate in advanced and translation research. This course will expand basic research knowledge and expose MD students to current advanced research. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## ENGINEERING MECHANICS AND ASTRONAUTICS (EM A)

## EMA1-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. Enroll Info: None Requisites: Sophomore standing only
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None Requisites: None
Repeatable for Credit: No

## E M A 110 - INTRODUCTION TO PRIVATE PILOT

4 credits.
The first of a two-course series to earn a private pilot's license. Teaches all of the ground- school subjects necessary to become a private pilot. Topics include aircraft structure, mechanical systems, flight instruments and avionics, aerodynamics, aircraft performance, aviation meteorology, airport operations, navigation, aeromedical factors, rules and regulations. In-class discussion will center around PC-based simulation scenarios that feature classroom demonstrations of the theory taught online. Students will be charged flight fees for this course. Flight fees may vary, dependent on skill of student and instructor fees. See the class notes for information about fees. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2019

## E M A 120 - PRIVATE PILOT CERTIFICATION

3 credits.
The second of a two course sequence, serves as a finisher course for students who have either taken E M A 110 or have some flying experience and have passed their FAA written exam. The two-series course is designed to take students from zero flying experience to certificated private pilots. Enroll Info: None
Requisites: E M A 110
Repeatable for Credit: No
Last Taught: Spring 2019
E M A 201 - STATICS
3 credits.
Principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia of areas, and friction. Enroll Info: None
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: Fall 2020
EMA 202 - DYNAMICS
3 credits.
Kinematics, force-mass-acceleration relations, work and energy, impulse and momentum, moments of inertia and mass. Enroll Info: None
Requisites: EM 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: Fall 2020

## E M A 291 - PROJECTS IN ENGINEERING MECHANICS \& ASTRONAUTICS <br> 1-3 credits.

Individual engineering projects under staff supervision. Enroll Info: None 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: (M E 306, E M A 303 or concurrent enrollment) or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## E M A/CBE/CHEM/M E 425 - UNDERGRADUATE RHEOLOGY SEMINAR

 0-1 credits.Rheology seminar encouraged for all interested in professions related to polymers, suspensions or rheology. Enroll Info: None
Requisites: Junior or senior standing only, 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: Fall 2011

## 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. Enroll Info: None
Requisites: Declared in Engineering Mechanics and (E M A 303 or
M E 306)
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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 2020

## 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. Enroll Info: None 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 2020

## E M A 489 - HONORS IN RESEARCH

1-3 credits.
Undergraduate research and senior honors thesis in engineering mechanics and astronautics. Enroll Info: None
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 <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## E M A 524 - ROCKET PROPULSION

3 credits.
Rocket performance. One dimensional gasdynamics. Thrust chambers, nozzle design criteria. Fundamentals of combustion. Rocket configurations. Enroll Info: None
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 2020

## E M A/M E 540 - EXPERIMENTAL VIBRATION AND DYNAMIC SYSTEM ANALYSIS <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None 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 2020
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, gyrodynamics, generalized coordinates. Lagrange's equations. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## E M A/E P 548 - ENGINEERING ANALYSIS II

3 credits.
Function of complex variable, series solution of differential equations, partial differential equations. Enroll Info: A year of math beyond calculus
Requisites: (MATH 322 and 320), (MATH 322 and 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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: E M A 469 and (have completed or be concurrently enrolled in two of EM A 506, 519, 521, 542, 545)
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## E M A 599 - INDEPENDENT STUDY

1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2019

## E M A 690 - MASTER'S RESEARCH

1-9 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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. Enroll Info: 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 2020
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. Enroll Info: None
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. Enroll Info: 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 2019

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. Enroll Info: 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 2020

## 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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 2020

## 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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 790 - MASTER'S RESEARCH AND THESIS
1-9 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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

## E M A 890 - PRE-DISSERTATOR RESEARCH

1-9 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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

## E M A/CBE/CHEM/M E 925 - RHEOLOGY RESEARCH SEMINAR

 0-1 credits.Exploration of the most recent research literature on viscoelasticity, constitutive equations, non-Newtonian flow systems, fluid metering devices, kinetic theory of macromolecules, and rheooptical phenomena. Periodic reports on recent advances made by research workers in the various rheology groups on the Madison campus. Enroll Info: None 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 2011

E M A 990 - RESEARCH AND THESIS
1-12 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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

## 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. Enroll Info: None 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 2020
E P 272 - ENGINEERING PROBLEM SOLVING USING MAPLE 1 credit.

An introduction to multi-step engineering problem solving using Maple (symbolic mathematics) software. Enroll Info: None
Requisites: MATH 222 or 276, or member of Engineering Guest Students Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Declared in Engineering Physics
Course Designation: Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: E P 468 and declared in Engineering Physics
Course Designation: Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None 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 2020
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.

## Enroll Info: None

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 2020

## E P/E M A 548 - ENGINEERING ANALYSIS II

3 credits.
Function of complex variable, series solution of differential equations, partial differential equations. Enroll Info: A year of math beyond calculus
Requisites: (MATH 322 and 320), (MATH 322 and 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 2020

## EP/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. Enroll Info: None
Requisites: (M E 361 or PHYSICS 415) and (B M E/CBE 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. Enroll Info: None
Requisites: EP 469 and declared in Engineering Physics
Course Designation: Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Fall 2020
E P 569 - RESEARCH PRACTICUM IN ENGINEERING PHYSICS II 3 credits.

Undergraduate research projects supervised by faculty members. Senior thesis. Enroll Info: None
Requisites: EP 568 and declared in Engineering Physics
Course Designation: Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Fall 2020
E P 602 - SPECIAL TOPICS IN ENGINEERING PHYSICS 1-3 credits.

Subject matter, credits and prerequisites vary. Enroll Info: None Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

EP/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. Enroll Info: None 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 2019

## E P/COMP SCI/E C E/E M A/M E 759 - HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## EP/ME 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. Enroll Info: Knowledge of fluid mechanics [such as M E 363 or B M E/CBE 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 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. Enroll Info: None
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

## ENGINEERING PROFESSIONAL <br> DEVELOPMENT (EP D)

EPD 151 - TECHNICAL INFORMATION RESOURCES
1 credit.
Development of information retrieval skills and effective search strategies, focusing on technical information resources appropriate for engineers and scientists. Selection and use of electronic bibliographic databases, indexes and abstracts, patents and government information, library catalogs, and computer networks will be integral to individual and team projects. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2015

## E P D 199 - FRESHMAN INDEPENDENT STUDY

1-3 credits.

## Enroll Info: None

Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2011

E P D 265 - TEAMS AND THE ENGINEERING PROFESSION 1 credit.

The communication strategies necessary for effective teamwork in engineering and science professions is the focus of this project-based course. Project options include international, ethical, and engineering business plan issues. Key communication elements are team structures, interpersonal skills, team theories, application, and evaluation. Enroll Info: EPD 155 or other crse that satisfies Part A Communication Requirement or EPD 160 or cons inst
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2016

## E P D 275 - TECHNICAL PRESENTATIONS

2 credits.
This course focuses on the principles and theory of effective oral technical presentations and provides a framework for applying the principles in professional settings common to the engineering profession. The course consists of five parts: 1) preparation, delivery, and evaluation of oral presentation on technical subjects, 2) analysis of professional "real-world" technical presentations, 3) survey of presentation technology 4) self-analysis including listening and non-verbal skills, and 5) practice of group discussion and interview skills. Enroll Info: So st
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## E P D 299 - SOPHOMORE INDEPENDENT STUDY

1-3 credits.

Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2011

## E P D 332 - BASIC TECHNICAL JAPANESE II

3 credits.

Completes the grammar necessary for reading technical writing in the sciences. Concludes with individual projects in specialized fields. Enroll Info: None
Requisites: E P D 330 (or E ASIAN 330 prior to fall 2019)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

## E P D 374 - INTERMEDIATE TECHNICAL JAPANESE I

3 credits
Fundamentals of Japanese grammar and the most frequent 300 Kanji in the physical sciences; reading, comprehending and translating Japanese scientific texts. Enroll Info: Does not satisfy LS language requirements.
Requisites: ASIALANG 203 (E ASIAN 203 prior to Summer 2019)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## E P D 375 - INTERMEDIATE TECHNICAL JAPANESE II

3 credits.

Continuation of E P D 374; development of a Kanji frequency list and translation of a technical article. Enroll Info: Does not satisfy LS language or major requirement. Not open to special students.
Requisites: E P D 374 (or E ASIAN 374 prior to fall 2019)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## E P D/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. Enroll Info: 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)
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## E P D 378 - NETWORK SKILLS FOR REMOTE LEARNERS

1 credit.

This course is designed to provide students with the knowledge, skills, and attitudes they need to be efficient and effective independent learners in a networked environment. The three primary modules for the course include: learning management, information management, and computer skills. Enroll Info: Admission to Master of Engineering in Engineering Management or Master of Engineering in Engine Systems distance degree program or department consent
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2016

## E P D 395 - ELEMENTS OF COMPUTER-ASSISTED PUBLISHING

 3 credits.This course focuses on concepts of the writing-to-publishing process and computer-assisted publishing. It integrates principles of technical writing and graphic design with the use of microcomputers. Laboratory work includes the design of a technical document. Enroll Info: EPD 397 or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2015
E P D 398 - TECHNICAL COMMUNICATIONS INTERNSHIP
1 credit.
Two component course: 1) professional writing experience entailing approximately 80 hours internship with a local corporation, industry, government agency, or educational unit; and 2) one 50 minute class every other week to structure the internship and provide discussion of related issues. Enroll Info: EPD 397; 6 cr in other communicatn crses or cons inst 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 2020

## E P D 399 - JUNIOR INDEPENDENT STUDY

1-3 credits.
Enroll Info: None
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 2012

## EP D 416 - ENGINEERING APPLICATIONS OF STATISTICS 3 credits.

Course 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. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

EPD 470 - ENGINEERING PROBLEM SOLVING WITH COMPUTERS 3 credits.

Develops computer-assisted skills necessary for solving complex engineering problems. Uses a series of case studies that develop techniques for solving linear and nonlinear algebraic systems, optimization problems, data approximation problems, and systems of ordinary differential equations. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent
Requisites: Declared in Master of Engineering in Professional Practice program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: EPD 397 or cons inst

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2016
E P D 499 - SENIOR INDEPENDENT STUDY
1-3 credits.

## Enroll Info: None

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

## E P D 518 - QUALITY ENGINEERING AND QUALITY MANAGEMENT

 3 credits.The overall purpose of this course is to enhance the learners' basic business and decision-making skills related to quality systems and process improvement. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent
Requisites: Declared in Master of Engineering in Professional Practice program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

EPD 601 - JAPANESE FOR BUSINESS AND INDUSTRY 3-4 credits.

Business language and commercial practices in contemporary Japanese society. Enroll Info: None
Requisites: E P D 375 or ASIALANG 304 (or E ASIAN 304 or 375 prior to fall 2019)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018
E P D 602 - JAPANESE FOR POLITICS AND GOVERNMENT
3-4 credits.
Language and patterns of expression used in political discourse and policymaking in Japan. Enroll Info: None
Requisites: E P D 375 or ASIALANG 304 (or E ASIAN 304 or 375 prior to fall 2019)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2019

## E P D 603 - ADVANCED TECHNICAL JAPANESE SEMINAR

$3-4$ credits.
Students will read an intermediate/advanced Japanese university textbook in the sciences and view videotaped lectures by Japanese university faculty members in parallel with the content of the textbook. Enroll Info: E Asian 430 or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2019

## E P D 604 - RESEARCH IN JAPANESE TECHNICAL LITERATURE

2-6 credits.
Graduate students in the sciences and engineering pursue individual projects to explore recent Japanese literature in their research fields. Enroll Info: EPD 530 or EPD 603 or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## EP D 611 - ENGINEERING ECONOMICS AND MANAGEMENT

 3 credits.This course addresses principles and practices of interpreting financial information and performing engineering-related economic analyses. This course focuses on the practical use of economic information for decision-making. The four course modules are: 1) Basic Accounting Concepts; 2) Management Concepts; 3)Pricing and Product Decisions; and 4) Systems. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
EPD 612 - TECHNICAL PROJECT MANAGEMENT
3 credits.
Learn key principles and tools of project management applicable to a broad range of engineering projects. The course 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. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
EP D 613 - INTERNATIONAL ENGINEERING STRATEGIES AND OPERATIONS
3 credits.
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. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Spring 2020
E P D 615 - INDEPENDENT READING AND RESEARCH IN APPLIED

## ENGINEERING

2 credits.
Conduct independent reading and research in an applied engineering topic of student's choice under the guidance of a UW faculty member or project mentor. Learn and use a variety of in-depth research techniques with assistance from Wendt Engineering Library. Employ a thorough understanding of genre conventions to craft an in-depth proposal, literature review, and technical presentation for distinct practitioner audiences. Present results of research at subsequent Master of Engineering in Engineering Management residency public session in late August. Enroll Info: None
Requisites: Declared in Master of Engineering in Professional Practice program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2017

## 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. Enroll Info: None 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: Summer 2020

## EP 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. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent
Requisites: Declared in Master of Engineering in Professional Practice program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Spring 2020

## E P D 618 - APPLIED LEADERSHIP AND MANAGEMENT OF ENGINEERING ORGANIZATIONS <br> 3 credits.

Addresses strategies, models, and practices for leading and managing engineering organizations in a context directly relevant to practicing engineers. Students will 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.
Students will 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. Enroll Info: Admission to Master of Engineering in Engineering Management distance degree program or department consent
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## EPD 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 621 - BATTERIES FOR XELECTRIFIED VEHICLES <br> 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. Enroll Info: None
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 622 - ENGINE DESIGN I

2 credits.
The overall purpose of this course is to provide the learners with an understanding of engine applications, customer need assessment, and engineering product planning. Enroll Info: Admission to Master of Engineering in Engine System degree prgm B.S. in engr or equiv. EPD 621 Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## E P D 623 - ENGINE DESIGN II

4 credits.
The overall purpose of this course is to provide the learners with an advanced understanding of internal combustion engine design. Enroll Info: Admission to Master of Engineering in Engine Systems degree prgm B.S. in engr or equiv. EPD 621622

Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## E P D 624 - ENGINE PERFORMANCE AND COMBUSTION

 4 credits.Provides learners with a physically based understanding of combustion, efficiency, and exhaust emission formation and control in internal combustion engines. Enroll Info: Admission to Master of Engineering in Engine System degree prgm B.S. in engr or equiv

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
E P D 625 - ENGINE GAS DYNAMICS
2 credits.
Provides a physically based understanding of gas dynamics with applications to internal combustion engines. Enroll Info: None
Requisites: E P D 642 and declared in Master of Engineering: Engine Systems
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## E P D 626 - ENGINE PROJECT MANAGEMENT

3 credits.
Learn and practice how to plan, manage, and control a variety of projects, from simple design exercises to the complete design, analysis, development and release to production of a new engine. Enroll Info: Admission to Master of Engineering in Engine Systems degree prgm B.S. in engr or equiv

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
E P D 627 - PERSPECTIVES ON ENGINE MODELING
2 credits.
Learn about 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. Enroll Info: Admission to Master of Engineering in Engine Systems degree prgm B.S. in engr or equiv
Requisites: None
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 refulation, and technological advances to make an assessment of the future of engines and powertrain systems for vehicles throughout the world. Enroll Info: Admission to Master of Engineering in Engine Systems Degree Program and B.S. in Engineering or equivalent
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2011

## E P D 629 - POWERTRAIN SYSTEMS AND CONTROLS

4 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. Enroll Info: None
Requisites: Declared in Master of Engineering, Engine Systems program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: E P D 623 and 624
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No

## EPD 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. Enroll Info: None
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

## EP 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, parallelsequential). Pulse conservation and exhaust gas recirculation will be addressed. Includes advanced considerations including the Miller Cycle, turbocompounding, and e-boosting. Enroll Info: None
Requisites: E P D 625 or concurrent enrollment
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
EPD 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 and GPC, thermal characterization, rheological characterization, as well as scattering of various types of electromagnetic radiation. Introduction to characterization methods used in industry and polymer crystallography. Enroll Info: None
Requisites: E P D 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: E P D 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info:

## None

Requisites: E P D 636
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## E P D 641 - ESSENTIAL SKILLS FOR ENGINEERING PRODUCTIVITY

 2 credits.Essential Skills for Engineering Productivity (ESEP) provides the knowledge, skills and attitudes needed to be efficient and effective independent learners in a networked environment. This course focuses on key concepts and critical skills for remote learning, teamwork, working with colleagues at a distance, and engineering productivity. Additionally, a large component of this course teaches effective ways of getting engineering information across to large or small audiences in live or web based presentations. Enroll Info: Admission to an online Master of Engineering Program
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

## E P D 642 - THERMAL SYSTEMS ENGINEERING

2 credits.
Use the 1 st and 2nd laws of thermodynamics in the analysis of engines, and utilize ideal gas mixture, thermodynamics and combustion principles to determine adiabatic flame temperature and chemical equilibrium. Enroll Info: Admission to Master of Engineering in Engine Systems
Degree Program and B.S. in Engineering or equiv
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## E P D 643 - ANALYSIS OF TRENDS IN ENGINES - LEGISLATIVE DRIVERS AND ALTERNATIVE FUELS <br> 1 credit.

With a scientifically-based approach, this course will consider trends in energy availability, emission control and regulation, and technological advances for assessing the future of engines and powertrain systems in vehicle applications throughout the world. Enroll Info: Admission to Master of Engineering in Engine Systems Degree Program and B.S. in Engineering or equivalent
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## E P D 644 - ANALYSIS OF TRENDS IN ENGINES - POWERTRAIN TECHNOLOGIES AND MANUFACTURING

1 credit.
Take a scientifically-based look at trends in technological advances to make an assessment of the future of engines and powertrain systems for vehicles throughout the world as well as manufacturing constraints on future development of engines. Enroll Info: Admission to Master of Engineering in Engine Systems Degree Program and B.S. in Engineering or equivalent.
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: Grad stdt in sci or engr or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
EP 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. Enroll Info: Junior standing
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## E P D 661 - INDUSTRIAL ECOLOGY: SUSTAINABILITY TOOLS IN CONTEXT

3 credits.
Introduces sustainability frameworks and addresses industrial ecology by learning how and when to use a range of tools that offer systems thinking perspectives (e.g. Mass Flow analysis, Footprinting, SLCA, SWOT, EIOLCA, LCA, MIPS). Assist in constructing an evaluation matrix to evaluate tool application contexts, and discuss the relationship between optimizing systems through the use of tools and larger sustainability issues/goals. Enroll Info: Acceptance in the ME-Sustainable Systems Engineering program
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2017

## E P D 663 - ENGINEERING SUSTAINABILITY AND SOCIETY SEMINAR AND CONFERENCE <br> 1 credit.

Each April, the University of Wisconsin Nelson Institute for Environmentaltudies hosts an Earth Day Conference in Madison, Wisconsin. The conference provides a forum for a diverse community of academia, industry and the community to discuss environmental, social, and economic aspects of sustainability. This online course prepares students in the Master of Engineering Sustainable Systems Engineering program to attend this conference through research projects and classroom discussion prior to Earth Day on the conference theme and its relationship with engineering practice. Students then travel to Madison, Wisconsin for the conference and discussion with faculty before and after the conference (travel expenses not included with tuition). Additional discussion and student presentations follow in the weeks after the conference. Enroll Info: Admission into the Sustainable Systems Engineering program is required

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015
E P D 669 - SUSTAINABLE SYSTEMS ENGINEERING CAPSTONE 3 credits.

The Sustainable Systems Engineering (SSE) Capstone gives teams of students the opportunity to demonstrate their ability to think globally, sustainably, and creatively. Throughout this course, students will 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. Projects should showcase the knowledge and analytical skills acquired during the SSE program, and integrate tools, science and communication to address a community or industry need. Students will also work with an industry mentor and customer throughout their project. Enroll Info: Completion of at least 21 credits in the SSE program
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## EP D 690 - SPECIAL TOPICS IN ENGINEERING PROFESSIONAL DEVELOPMENT <br> 1-3 credits.

Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## E P D 699 - INDEPENDENT STUDY

1-3 credits.

## Enroll Info: None

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 2020

## E P D 700 - CONNECTED LEARNING ESSENTIALS <br> 1 credit.

The course is designed to provide students with the knowledge, skills and abilities needed to be efficient and effective learners in a networked environment. The course recognizes that the role of "learner" is only one of many roles that you must play in your busy life. It strives to help you become easily adaptable to digital tools and technologies. The course cannot address all network and computing situations required by a student or professional, but will focus on key concepts, orientation, and critical skills that have been identified as key professional competencies of a digitally literate professional. You will learn key concepts to be an effective online learner and connected professional. This includes: tools and strategies for online learning; efficient time and attention management; tools and best practices for online collaboration and communication; and techniques for the continuous improvement of skills in all applicable facets of digital professional work. The goals of the course are to teach a strategic approach to learning online and to impart critical professional competencies for future success. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## E P D 701 - WRITING FOR PROFESSIONALS <br> 1 credit.

Professional Writing is an online course in the Professional Literacy Course suite. The goal of this 1 -credit, 8 -week course is to prepare students to produce effective written communication that is suitable for inter-professional and inter-disciplinary audiences in a variety of workplaces. Assignments apply strategies and tools introduced in live web conferences and readings to common informal and formal workplace writing, including email, memos, proposals and executive summaries. Enroll Info: None
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 702 - PROFESSIONAL PRESENTATIONS 1 credit.

In this course, you will sharpen your ability to create, edit, review, and present information in an efficient, clear, and effective way for your audiences. The course will develop your presentation skills through a series of presentations related to your professional interests and work. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## EP D/L IS 703 - MANAGING DIGITAL INFORMATION

1 credit.
Helps professionals to effectively and ethically protect and organize the information that they collect, create, and manage. It also presents collaboration tools and techniques for information creation and management. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No

## E P D 704 - ORGANIZATIONAL COMMUNICATION AND PROBLEM SOLVING <br> 1 credit.

One of the most important processes in complex organizations is judgment, problem-solving, and decision-making. This course aims to help people improve their problem solving within complex organizations with a special emphasis on case studies and improving communication. The material will be from cross-discipline sources (organizational behavior, organizational communication, social psychology). The first part of the course will focus on different theories of how people solve problems and how to communicate problems effectively. The second part of the course will focus on using empirical science to learn how to effectively use groups and teams to communicate, innovate, and make decisions. The third part of the course will focus more on applied decision-making and communication at the organizational level with an emphasis on networks of communication, nudging ethical behavior, and conflict. Case studies are used that incorporate organizational communication within workplace scenarios. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## E P D 706 - CHANGE MANAGEMENT <br> 1 credit.

Provides emerging and practicing professionals foundational knowledge sufficient to develop a change management strategy and implement it using proven processes and tools. Through this course, students will be better prepared to deliver effective organizational performance. The course applies contemporary concepts and methods in change management through student selected projects. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## E P D 708 - CREATING BREAKTHROUGH INNOVATIONS

1 credit.
Innovation needs processes and methods. Innovation needs tools and frameworks. But, there is no ONE right process, method, tool, or framework. Those are very context sensitive to things such as company, industry, and culture. This course is not about those things. We need to be able to be problem definers and insight generators that can apply what we learn in the real world, creating solutions and processes not seen before. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## EPD 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 your plan for growing your leadership competency through the rest of the Master of Engineering Management program and beyond. Enroll Info: Declared in Master of Engineering Management program
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 712 - ETHICS FOR PROFESSIONALS

1 credit.
Explores how our actions affect others and influence the choices we make within the workplace. This course will enhance ethical competencies by giving students opportunities to discuss challenges to behavior and decision-making in different professional contexts. Enroll

## Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## E P D 713 - KEY LEGAL CONCEPTS FOR PROFESSIONALS 1 credit.

An introduction to basic legal concepts, sources, and reasoning. Laws affect all aspects of our lives. For people without legal training, though, the legal language, procedure, and argumentation is a bit bewildering.
This course aims to demystify law by providing an introduction to basic legal concepts, an overview of several key substantive areas of law, and an explanation of ways in which law functions in professional practices. The course will be grounded in U.S. and closely related common law jurisdictions, but it will consider other legal systems and international law as well. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Fall 2019

## E P D 720 - ENGINE NOISE AND VIBRATION <br> 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. Enroll Info: None Requisites: Declared in Master of Engineering, Engine Systems program Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## EPD 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. Enroll Info: Declared in Master of Engineering in Sustainable Systems Engineering
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## EP D/ACCT I S/GEN BUS 781 - FINANCIAL AND BUSINESS ACUMEN

 1 credit.This course is designed with a keen awareness for the needs of the nonfinancial 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
EP D/GEN BUS/M HR 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business
Exchange program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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
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. Enroll Info: None
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: Fall 2020
ENGL 141 - SCIENCE FICTION AND FANTASY
3 credits.

An introduction to the literature of science fiction and fantasy; specific topics will vary. Enroll Info: None
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 2020

ENGL 142 - MYSTERY AND CRIME FICTION
3 credits.
An exploration of mystery and crime fiction written in English. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None 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 2020
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. Enroll Info: None 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 2020

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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

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. Enroll Info:

## None

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 2020
ENGL 167 - BRITISH AND AMERICAN WRITERS
3 credits.
An introduction to British and American literature through particular writers and themes. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020

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. Enroll Info: None

## 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
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. Enroll Info: None
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 2020

ENGL 177 - LITERATURE AND POPULAR CULTURE
3 credits.
A selected topic studying the intersection of literature and popular culture in various forms and media. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

ENGL 181 - FIRST-YEAR HONORS SEMINAR
3 credits.
Honors literature seminar for first year students. Topic and materials will vary. Enroll Info: None
Requisites: First Year students only and declared in Honors program
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
Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018
ENGL 182 - INTRODUCTION TO LITERATURE FOR HONORS 3 credits.

Introductory honors course in discussion format. Topic and materials will vary. Enroll Info: None
Requisites: Declared in honors program
Course Designation: Breadth - Literature. Counts toward the Humanities req
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: Fall 2020

## 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. Enroll Info: Students should be enrolled concurrently in another course where academic writing is assigned.
Requisites: Consent of instructor
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: Summer 2020

## 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. Enroll Info: Not open to auditors
Requisites: Satisfied Communications A requirement and sophomore standing
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 2020

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. Enroll Info: None
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 2020

## ENGL 207 - INTRODUCTION TO CREATIVE WRITING: FICTION AND

 POETRY WORKSHOP3 credits.
Fiction writing and poetry writing, with readings of writers as models.
Enroll Info: None
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: Fall 2020

## ENGL 214 - THE ENGLISH LANGUAGE

3 credits.
An overview of the structure, use, and development of the English
language and its varieties. Enroll Info: None
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 2020
ENGL 219 - SHAKESPEAREAN DRAMA
3 credits.
A survey covering most of the plays through 1600. Enroll Info: None
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. Enroll Info: None
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 2015
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. Enroll Info: None
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 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. Enroll Info: None 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. Enroll Info: None
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 2020

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. Enroll Info: None
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 242 - LITERATURE AND CULTURE II: FROM THE 18TH CENTURY TO THE PRESENT <br> 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. Enroll Info: None
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 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. Enroll Info: None
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 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2012

ENGL/GEN\&WS 248 - WOMEN IN ETHNIC AMERICAN LITERATURE 3 credits.

American literature by and about women, written by authors from ethnic groups. Enroll Info: None
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 2020
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. Enroll Info: None
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. Enroll Info: None
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 2015

## 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. Enroll Info: None
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. Enroll Info: None 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 <br> 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. Enroll Info: None
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: Spring 2018
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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
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. Enroll Info: None
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: Fall 2020

ENGL 314 - STRUCTURE OF ENGLISH
3 credits.
Linguistic methods of analysis and description of English syntax and morphology. Enroll Info: None
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 2020
ENGL 315 - ENGLISH PHONOLOGY
3 credits.
Basic principles of phonetics and phonology applied to the description of
English. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

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. Enroll Info: None
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: Summer 2020
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. Enroll Info: None
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 2020

## ENGL 328 - THE SIXTEENTH CENTURY

3 credits.
Literature and culture of Britain in the sixteenth century. Enroll Info: None 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 340 - ROMANTIC LITERATURE AND CULTURE
3 credits.
Literature of the Romantic age in relation to philosophical, cultural, historical, artistic or scientific backgrounds and contexts. Enroll Info: None
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 344 - VICTORIAN LITERATURE AND CULTURE 3 credits.

Victorian writers, such as Dickens, the Brontes, the Brownings, and George Eliot, in historical context. Enroll Info: None
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 2012
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. Enroll Info: None
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 346 - VICTORIAN POETRY
3 credits.

An exploration of Victorian poets, such as the Brownings, Tennyson, and Christina Rossetti. Enroll Info: None
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. Enroll Info: None
Requisites: GEN\&WS 101, 102, 103, or 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: Fall 2020

ENGL 351 - MODERNIST NOVEL
3 credits.
Modernist novelists such as Virginia Woolf, James Joyce, and E. M.
Forster. Enroll Info: None
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. Enroll Info: None
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 353 - BRITISH LITERATURE SINCE 1900
3 credits.
Survey of twentieth-century British literature including fiction, poetry, and drama. Enroll Info: None
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
ENGL 356 - NINETEENTH-CENTURY AMERICAN FICTION
3 credits.
A comprehensive survey of the American novel from its beginnings in the late eighteenth century to 1914. Enroll Info: None
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 2013

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. Enroll Info: None
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 358 - LITERATURE OF THE AMERICAN RENAISSANCE 3 credits.

Historical survey of the major figures, genres, and ideas of the Romantic period (1835 to the Civil War). Enroll Info: None
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 2012
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. Enroll Info: None
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 361 - MODERN AND CONTEMPORARY AMERICAN LITERATURE 3 credits.

Survey of modern and contemporary American literature including fiction poetry, drama, and criticism. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Literature. Counts toward the Humanities req
Level - Intermediate
\&SS Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020

ENGL 362 - AMERICAN FICTION SINCE 1900
3 credits.
Intensive study of a limited number of major American authors or single novels. Enroll Info: None
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 2014
ENGL 363 - THE AMERICAN SHORT STORY
3 credits.
Major American stories from Washington Irving to the present. Enroll Info: None
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 2012
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. Enroll Info: None
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 373 - CONTEMPORARY POETRY
3 credits.
Study of significant recent poetry written in English. Enroll Info: None
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 2020

## ENGL 374 - AFRICAN AND AFRICAN DIASPORA LITERATURE AND CULTURE <br> 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; intraracial/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. Enroll Info: None
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 2019

## ENGL 375 - LITERATURES OF MIGRATION AND DIASPORA

3 credits.
Literature by or about people who leave homes and homelands by choice or compulsion. Enroll Info: None
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 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

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. Enroll Info: None
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
ENGL 381 - SOPHOMORE HONORS: RESEARCH METHODS IN ENGLISH 3 credits.

Methods and tools of literary and literary/historical research, normally by tracing a theme, genre, or idea across several periods of literature. Course work leads to the writing of a long research paper. Enroll Info: None
Requisites: Sophomore standing and declared in honors program
Course Designation: 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 2013

## 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. Enroll Info: None
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: Fall 2020

## ENGL/GEN\&WS 401 - RACE, SEX, AND TEXTS (HOW TO DO THINGS WITH WRITING) <br> 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. Enroll Info: None
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 2019

## ENGL 403 - SEMINAR ON TUTORING WRITING ACROSS THE CURRICULUM <br> 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. Enroll Info: 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 2020

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. Enroll Info:

## None

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 2020

ENGL 408 - CREATIVE WRITING: FICTION WORKSHOP
3 credits.
Writing literary fiction. Enroll Info: None
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: Fall 2020
ENGL 409 - CREATIVE WRITING: POETRY WORKSHOP
3 credits.
Writing literary poetry. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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 2019

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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2019
ENGL 417 - HISTORY OF THE ENGLISH LANGUAGE
3 credits.
Linguistic and sociolinguistic change in English from its beginnings to the present. Enroll Info: None
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 2019

ENGL 420 - TOPICS IN ENGLISH LANGUAGE AND LINGUISTICS 3 credits.

Study of a topic in English language and linguistics. Enroll Info: None 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 2020
ENGL 422 - OUTSTANDING FIGURE(S) IN LITERATURE BEFORE 1800 3 credits.

Study of major figure or figures in literature written before 1800. Enroll Info: None
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 2018

ENGL/MEDIEVAL 423 - TOPIC IN MEDIEVAL LITERATURE AND CULTURE 3 credits.

Study of a topic in medieval literature. Enroll Info: None
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
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. Enroll Info: None
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

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. Enroll Info: None
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/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. Enroll Info: None
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 2017
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. Enroll Info: None
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 430 - TOPIC IN EARLY MODERN LITERATURE AND CULTURE 3 credits.

Study of a topic in Early Modern literature. Enroll Info: None 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 2020

ENGL 431 - EARLY WORKS OF SHAKESPEARE 3 credits.

Study of four Shakespeare plays through 1600, with the reading of several others. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Literature. Counts toward the Humanities req
Level - Intermediate
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
ENGL 432 - LATER WORKS OF SHAKESPEARE
3 credits
Study of four Shakespeare plays after 1600 with the reading of several others. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Literature. Counts toward the Humanities req
Level - Intermediate
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2019
ENGL 433 - SPENSER
3 credits.
Study of Edmund Spenser's major poems. Enroll Info: None
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 2015
ENGL/RELIG ST 434 - MILTON
3 credits.
Study of John Milton's poems and selected prose. Enroll Info: None
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 <br> CULTURE <br> 3 credits

Study of a topic in 18th-Century literature. Enroll Info: None
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 2016

ENGL 439 - TOPIC IN EARLY AMERICAN LITERATURE AND CULTURE 3 credits.

Study of a topic in Early American literature. Enroll Info: None
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. Enroll Info: None
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 2017
ENGL 444 - TOPIC IN ROMANTIC OR VICTORIAN LITERATURE AND CULTURE
3 credits.
Study of a topic in 19th-Century British literature. Enroll Info: None 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 2018
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. Enroll Info: None
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. Enroll Info: None
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

ENGL 454 - JAMES JOYCE
3 credits.

Study of the works of James Joyce. Enroll Info: None
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 455 - A STUDY OF AN OUTSTANDING FIGURE OR FIGURES IN AMERICAN LITERATURE
3 credits.

Study of a figure in American literature. Enroll Info: None
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 2020

## ENGL 456 - TOPIC IN NINETEENTH-CENTURY AMERICAN LITERATURE AND CULTURE <br> 3 credits

Study of a topic in 19th-Century American literature. Enroll Info: None 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 2020

ENGL 457 - TOPIC IN AMERICAN LITERATURE AND CULTURE SINCE 1900
3 credits.
Study of a topic in American literature. Enroll Info: None
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

ENGL 458 - MAJOR AMERICAN WRITER OR WRITERS 3 credits.

Study of major American writer(s). Enroll Info: None
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 459 - THREE AMERICAN NOVELISTS
3 credits.
Concentrated study of US novelists. Enroll Info: None
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 461 - TOPICS IN ETHNIC AND MULTICULTURAL LITERATURE 3 credits.

Literature in English by authors whose work reflects the experience of ethnic and minority groups. Enroll Info: None
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: Spring 2020

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. Enroll Info: None
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: Spring 2020

## ENGL/ASIAN AM/GEN\&WS 463 - RACE AND SEXUALITY IN AMERICAN LITERATURE <br> 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. Enroll Info: None 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. Enroll Info: None 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. Enroll Info: None
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 2019

ENGL 469 - INTERDISCIPLINARY STUDIES IN THE ARTS 1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: 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. Enroll Info: None
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 2017
ENGL 474 - TOPIC IN CONTEMPORARY LITERATURE
3 credits.
Study of recent literature written in English. Specific topic will vary. Enroll Info: None
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/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. Enroll Info: None
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: 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. Enroll Info: 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
ENGL 479 - CONTEMPORARY WORLD THEATRE IN ENGLISH
3 credits.
Significant recent dramatists who have written in English. Enroll Info: None
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 2012
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. Enroll Info: None
Requisites: Sophomore standing and declared in 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: Fall 2014

## ENGL 500 - WRITING IN WORKPLACES

3 credits.
Develop broader awareness of workplace writing in relation to personal literacy and rhetorical contexts. Practice in producing professional quality texts. Attention to digital writing situations, including writing for the web. Enroll Info: Students who complete ENGL 500 generally proceed to ENGL 501, Writing Workshop.
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 2014

ENGL 501 - WRITING INTERNSHIP
3 credits.
Practical experience in a workplace setting that requires writing. Analysis of professional writing situations and conventions. A final report and reflection connects the internship to previous coursework. May involve multi-modal composition (e.g., digital storytelling). Enroll Info: Students should have completed ENGL 500 before enrolling.
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 2013

## 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. Enroll Info: None
Requisites: Satisfied Communications A requirement and 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 2015
ENGL 508 - CREATIVE WRITING: ADVANCED FICTION WORKSHOP 3 credits.

Fiction writing. Enroll Info: None
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\&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: Fall 2020

ENGL 509 - CREATIVE WRITING: ADVANCED POETRY WORKSHOP
3 credits.
Poetry writing. Enroll Info: None
Requisites: ENGL 409 or graduate/professional standing. Students may not be concurrently enrolled with ENGL 307, 407, 408, 409, 410, 411, 469, 508 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
Honors - Accelerated Honors (!)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2013

## ENGL 514 - ENGLISH SYNTAX

3 credits.
Syntactic theory as applied to the analysis of English sentences. Enroll Info: None
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: Spring 2020
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. Enroll Info: None
Requisites: ENGL 415
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
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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020

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-byline 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. Enroll Info: None
Requisites: 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 nonexperts 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. Enroll Info: None
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 2020
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. Enroll Info: None
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. Enroll Info: None
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 2018
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. Enroll Info: None
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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
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? Enroll Info: None
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. Enroll Info: None
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 2019

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. Enroll Info: None
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 2019

## ENGL 560 - NARRATIVE THEORY

3 credits.

Narrative theory--the study of stories. Consider the purpose and value of stories for human cultures, their structure, and their ways of shaping experience. Enroll Info: None
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 2013
ENGL 561 - MODERN CRITICAL THEORIES
3 credits.
Variety and complexity of twentieth century critical thought. Intensive investigation of the works of selected theorists. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020
ENGL 615 - TESOL: TEACHING LISTENING AND SPEAKING
1 credit.
An overview of listening and speaking skills and how to teach them.
Enroll Info: None
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 2020
ENGL 616 - TESOL: TEACHING OF READING
1 credit.
An overview of reading and vocabulary skills and how to teach them.
Enroll Info: None
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 2019
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.
Enroll Info: None
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 2019
ENGL 618 - TESOL: TEACHING PRONUNCIATION
1 credit.
An overview of the features of English pronunciation and how to teach them. Enroll Info: None
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 2019

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. Enroll Info: Current enrollment in a UWMadison 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. Enroll Info: None
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: Summer 2019
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. Enroll Info: None
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
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. Enroll Info: None
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

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. Enroll Info: None
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

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. Enroll Info: None
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 2020
ENGL 680 - HONORS PROJECT
3 credits.
For further information, consult the department's Honors Coordinator or Undergraduate Advisor. Enroll Info: None
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 2020
ENGL 681 - SENIOR HONORS THESIS IN THE MAJOR
3 credits.
Mentored individual study for students completing honors theses. Enroll Info: None
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

ENGL 682 - SENIOR HONORS THESIS IN THE MAJOR 3 credits.

Mentored individual study for students completing honors theses. Enroll Info: None
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 2020
ENGL 691 - SENIOR THESIS
3 credits.
Mentored individual study for students completing theses. Enroll Info: None
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 692 - SENIOR THESIS
3 credits.
Mentored individual study for students completing theses. Enroll Info: None
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
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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: Fall 2020
ENGL 700 - INTRODUCTION TO COMPOSITION STUDIES 3 credits.

Rhetorical, linguistic, psychological, and social foundations of writing; implications for instruction. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
ENGL 702 - PERSPECTIVES ON LITERACY
3 credits.
Social, historical, and educational perspectives on literacy and literacy learning. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ENGL 703 - RESEARCH METHODS IN COMPOSITION STUDIES 3 credits.

Introduction to quantitative and qualitative research methods in composition studies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: 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 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. Enroll Info: None
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. Enroll Info: None
Requisites: LINGUIS 330
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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 crosslinguistic perspectives. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENGL 713 - TOPICS IN CONTEMPORARY ENGLISH LINGUISTICS
3 credits.
Study of a topic in contemporary English linguistics. Enroll Info: None
Requisites: 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 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. Enroll Info: None Requisites: ENGL 318
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ENGL 719 - SUMMER WRITING WORKSHOP
1-3 credits.
A workshop intended for high school teachers or other postbaccalaureate students. Enroll Info: 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 722 - COMPOSITION AND CRITICAL THEORIES 3 credits.

Study of the relationship between composition and critical theories.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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
$B C E$ and 1700 including the theatres of ancient Greece and Rome; medieval, Renaissance and early modern Europe; and the Muromachi and Tokugawa eras in Japan. Enroll Info: None
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. Enroll Info: None 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. Enroll Info: None
Requisites: 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 780 - CREATIVE WRITING: GRADUATE WORKSHOP 3 credits.

Professional training in the writing of fiction, poetry, or creative nonfiction. The topic will vary from semester to semester. Enroll Info: None
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

ENGL 781 - GRADUATE FICTION WORKSHOP 3 credits.

Students write short stories and novel chapters, critique the work of fellow students and read contemporary fiction. Enroll Info: None 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
ENGL 782 - GRADUATE POETRY WORKSHOP
3 credits.
Students write poems, critique the work of fellow students and read contemporary poetry. Enroll Info: None
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
ENGL 783 - CREATIVE WRITING PEDAGOGY SEMINAR
3 credits.
Creative writing pedagogy for MFA in creative writing students. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

ENGL 795 - ONE-CREDIT SEMINAR
1 credit.
Study of a topic in English language and literature. Enroll Info: None
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
ENGL 799 - INDEPENDENT READING
1-6 credits.
Enroll Info: None
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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENGL/MEDIEVAL 803 - TOPICS IN MEDIEVAL LITERATURE
3 credits.
Study of a topic in Medieval literature. Enroll Info: None
Requisites: 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 804 - TOPICS IN EARLY MODERN LITERATURE 3 credits.

Study of a topic in Early modern literature. Enroll Info: None 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

ENGL 805 - TOPICS IN EIGHTEENTH-CENTURY LITERATURE 3 credits.

Selected works, with an emphasis on literary and cultural background. Enroll Info: None
Requisites: 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

ENGL 806 - TOPICS IN ROMANTICISM
3 credits.
Study of a topic in Romanticism. Enroll Info: None
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. Enroll Info: None
Requisites: 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 808 - TOPICS IN MODERNISM
3 credits.
Study of a topic in Modernism. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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. Enroll Info: None
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. Enroll Info: None
Requisites: 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 814 - TOPICS IN CONTEMPORARY LITERATURE
3 credits.
Study of a topic in contemporary literature. Enroll Info: None
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

ENGL 816 - TOPICS IN ETHNIC AND MULTICULTURAL LITERATURE 3 credits.

Study of a topic in ethnic and multicultural literature. Enroll Info: None 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 817 - SEMINAR-AMERICAN LITERATURE
3 credits.
Study of a theme in American literature. Enroll Info: None
Requisites: 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 820 - TOPICS IN POETRY
3 credits.
Study of a topic in poetry. Enroll Info: None
Requisites: 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. Enroll Info: None
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

ENGL 825 - TOPICS IN LITERATURE AND THE ENVIRONMENT 3 credits.

Study of a topic in literature and the environment. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
ENGL 826 - TOPICS IN DIGITAL STUDIES
3 credits.
Study of a topic in digital studies. Enroll Info: None
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. Enroll Info: None
Requisites: 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. Enroll Info: None
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 830 - TOPICS IN PRINT CULTURE AND HISTORY OF THE BOOK 3 credits.

Study of a topic in print culture. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: 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 859 - SEMINAR-INTERDISCIPLINARY THEATRE STUDIES 2-3 credits.

Topics related to advanced research in theatre and performance studies. Topics vary by semester. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENGL 879 - ADVANCED SEMINAR IN LITERARY STUDIES 3 credits.

Study of a topic or theme in literature. Enroll Info: None
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
ENGL 900 - TOPICS IN COMPOSITION STUDY
3 credits.
Study of a topic in composition studies. Enroll Info: None
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. Enroll Info: None 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. Enroll Info: None 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. Enroll Info: None
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
ENGL 999 - INDEPENDENT READING FOR PHD PRELIMS
1-12 credits.
Consult graduate advisor. Enroll Info: 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: Fall 2020

## 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. Enroll Info: 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. Enroll Info: None Requisites: Enrolled in the International Student Summer Institute
Repeatable for Credit: No
Last Taught: Summer 2019

## ESL 114 - INTERMEDIATE ENGLISH LANGUAGE SKILLS

3 credits.
Semi-intensive course in intermediate English language skills. A multiskills focus on reading, writing, and communication skills essential in an academic setting. Enroll Info: Not open to auditors
Requisites: Placement into ESL 114
Repeatable for Credit: No
Last Taught: Fall 2017

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. Enroll Info: Not open to auditors Requisites: ESL 114 or placement into ESL 115
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: Not open to auditors.
Requisites: ESL 115 or placement into ESL 116
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Not open to auditors.
Requisites: ESL 116 or placement into ESL 117
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Not open to auditors.
Requisites: ESL 117 or placement into ESL 118
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: Fall 2020
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. Enroll Info: Intended for graduate students. Not open to auditors
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2020

## ESL 343 - ORAL COMMUNICATION SKILLS <br> 3 credits.

Practice in formal and informal communication skills, including listening comprehension, pronunciation, and conversational and presentation skills useful in an academic setting. Enroll Info: Not open to auditors Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Not open to auditors
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## ESL 345 - AMERICAN ENGLISH PRONUNCIATION

## 1 credit.

Techniques for improvement of the pronunciation of American English for non-native speakers of English. Enroll Info: Not open to auditors
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Not open to auditors
Requisites: 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 2020
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. Enroll Info: Not open to auditors
Requisites: Graduate/professional standing
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018
ESL 352 - ENGLISH FOR LAWYERS
3 credits.
Opportunities to express ideas through oral presentations and formal written work. Focus on specific topics in law. Enroll Info: Not open to

## auditors

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 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. Enroll Info: Not open to auditors
Requisites: Graduate/professional standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 wihin a broader context of dynamic social and ecological relationships. Enroll Info: None

## 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENTOM/ENVIR ST 201 - INSECTS AND HUMAN CULTURE-A SURVEY

## COURSE IN ENTOMOLOGY

3 credits.
Importance of insects in man's environment, emphasizing beneficial insects, disease carriers, and agricultural pests that interfere with man's food supply. Environmental problems due to insect control agents. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENTOM/AGRONOMY/NUTR SCI 203 - INTRODUCTION TO GLOBAL HEALTH <br> 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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## ENTOM 289 - HONORS INDEPENDENT STUDY

1-2 credits
Enroll Info: Enrolled in the CALS Honors Program Sophomore or Junior standing. INTER-AG 288
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.
Enroll Info: Open to Freshmen, Sophomore or Junior standing prior written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

ENTOM/ZOOLOGY 302 - INTRODUCTION TO ENTOMOLOGY 4 credits.

Principles including morphology and classification; a general collection of insects required of each student. Enroll Info: An elem course in zoology

## 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENTOM 321 - PHYSIOLOGY OF INSECTS
3 credits.
Anatomy, histology and basic physiology of organ systems in insects. Enroll Info: ENTOM/ZOOLOGY 302 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ENTOM 331 - TAXONOMY OF MATURE INSECTS
4 credits.
Principles of taxonomy, identification and taxonomic morphology of adult insects. Enroll Info: Entomol/Zool 302
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, or 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 2020

ENTOM 351 - PRINCIPLES OF ECONOMIC ENTOMOLOGY 3 credits.

Major economic insects: identification, life histories, bionomics, distribution, control; procedures in fundamental and practical inquiry. Enroll Info: Intro course in zoology
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll

## Info: None

Requisites: None
Course Designation: Sustain - Sustainability
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. Enroll Info: Intro course in zool or vet sci 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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
ENTOM 375 - SPECIAL TOPICS
1-4 credits.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

ENTOM 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION 1-8 credits.

Enroll Info: So, Jr or Sr st cons supervising inst, advisor, and internship program coordinator
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 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. Enroll Info: 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.
Lectures on anatomy/morphology, taxonomy, bionomics of immature insects (ordinal and familial levels). Ametabola, Paleoptera, Plecoptera, Trichoptera not covered in lecture (will be examined in lab). Labs emphasize utilizing taxonomix keys for identification (order and family). Required field trips and collection. Enroll Info: ENTOM/ZOOLOGY 302 or equiv, or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

ENTOM 450 - BASIC AND APPLIED INSECT ECOLOGY 3 credits.

Basic and Applied Insect Ecology is advanced course in population and community ecology, plant-insect interactions, insect biodiversity and biogeography, and applied ecology. The course will weave 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. We will use the current entomological and ecological scientific literature and draw on examples from a broad range of natural and managed ecosystems. As the semester progresses, the scope of the lectures and literature will broaden from pairwise species interactions (e.g., a predator and its prey) to the entire community of organisms and their physical environment. Lectures are designed to emphasize 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. Enroll Info: BIOLOGY/BOTANY/ZOOLOGY 151152 or consent of instructor
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
ENTOM 451 - BASIC AND APPLIED INSECT ECOLOGY LABORATORY 1 credit.

Basic and Applied Insect Ecology Laboratory/Discussion is the companion course for the lecture-based Basic and Applied Insect Ecology (Entomology 450). This course will include 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 the course lectures. Enroll Info: Concurrent or previous enrollment in Entomology 450, consent of instructor for undergraduates
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017

## ENTOM 468 - STUDIES IN FIELD ENTOMOLOGY

3 credits.
Period of intensive field work (2 weeks) outside Madison area. Concentration on structural, behavioral adaptations of insects to diverse habitats; dynamic relations between insects and plants, other animals and other insects. Student field project, literature review presentation required. Enroll Info: ENTOM/ZOOLOGY 302, Junior standing, and consent of instructor. (Recommended ecology course ENTOM 331 or 432) Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: One of the following: Bot/For/ Zoo 460, Ent/PI Path/For 500, PI Path/Bot 505, Forestry 550, or Entom 342
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENTOM/F\&W ECOL 500 - INSECTS IN FOREST ECOSYSTEM FUNCTION AND MANAGEMENT <br> 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. Enroll Info: BOTANY/
BIOLOGY/ZOOLOGY 151152 or equivalent
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2015

## ENTOM/BOTANY/PL PATH 505 - PLANT-MICROBE INTERACTIONS: MOLECULAR AND ECOLOGICAL ASPECTS <br> 3 credits.

Molecular and ecological aspects of the interactions between plants and microorganisms. This course 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. Enroll Info: An upper level crse in microbiol (e.g. Bact 303); biochem (e.g. BIOCHEM 501); genetics (e.g. GENETICS 466) or cons inst 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: No
Last Taught: Spring 2020

## ENTOM/ZOOLOGY 540 - THEORETICAL ECOLOGY

3 credits.

Introduction to theoretical ecology, including hands-on experience in computer modeling. For students with ecology background; does not require a strong math background. 3-credit option requires project and consent of instructor. Enroll Info: 1 year calculus, Zoo/Bot 260, Zoo/Bot/ For 460 or equiv, Jr st
Requisites: Junior standing; not open to special students
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
ENTOM 601 - SEMINAR IN METHODS OF SCIENTIFIC ORAL
PRESENTATIONS
1 credit.
Training for the presentation of short talks. Enroll Info: None
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 or BOTANY/BIOLOGY 130 or 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 Sustain - Sustainability
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## ENTOM/AGRONOMY/F\&W ECOL/M\&ENVTOX 632 - ECOTOXICOLOGY:

 THE CHEMICAL PLAYERS1 credit.
Introduction to natural and man-made toxins/toxicants, their distribution, transport, and fate in the environment. Enroll Info: None
Requisites: (CHEM 341 or 343 ) and ((BOTANY/BIOLOGY 130 and
ZOOLOGY/BIOLOGY 102) or 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). Enroll Info: None
Requisites: M\&ENVTOX 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. Enroll Info: None
Requisites: M\&ENVTOX 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.
Enroll Info: Honors candidacy
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2014
ENTOM 682 - SENIOR HONORS THESIS
2-4 credits.
Continuation of 681. Enroll Info: Honors program candidacy ENTOM 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2015
ENTOM 691 - SENIOR THESIS
2 credits.
Enroll Info: Senior standing consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2014
ENTOM 699 - SPECIAL PROBLEMS
1-4 credits.
Enroll Info: Cons inst Sr st
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 2020
ENTOM 701 - ADVANCED TAXONOMY
3 credits.
Enroll Info: ENTOM 331 and cons inst
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

## ENTOM/F\&W ECOL 711 - MULTIVARIATE ANALYSIS OF ECOLOGICAL AND COMMUNITY DATA <br> 2 credits.

This course will examine some common methods of multivariate data analysis in ecology and environmental science. Often called "community data analysis," this class will cover methods for the analysis of complex, multidimensional datasets that are collected in the study of plant, invertebrate, fish, and bird communities. We will also address the concurrent analysis of the environmental factors that may drive community distributions. All of this provides the basis for predictive modeling of distributions across landscapes. General methods we will cover include ordination (PCA, DCA, NMDS, CCA), clustering (or classification), and other comparative analyses of data matrices (ANOSIM, Mantel tests). The "class" (better called a "workshop") is designed to be applied, meaning that the objective is for students to learn in a "hands-on" way how to use these tools, and the circumstances under which their uses are either appropriate or inappropriate. Enroll Info: None Requisites: Students must have Stats 571 or 572 to enroll, if a student feels that they have an equivalent background, they must get permission of the instructor to enroll
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENTOM 801 - COLLOQUIUM
1 credit.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENTOM/BOTANY/GENETICS/ZOOLOGY 820 - FOUNDATIONS OF EVOLUTION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENTOM 875 - SPECIAL TOPICS
1-4 credits.
Enroll Info: None
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
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. Enroll Info: None
Requisites: 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
ENTOM/PSYCH/ZOOLOGY 950 - INTERDISCIPLINARY SEMINAR IN ANIMAL BEHAVIOR
1 credit.
Research methods in animal behavior studies in many disciplines. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013

ENTOM/AGRONOMY/ATM OCN/BOTANY/ENVIR ST/F\&W ECOL/GEOG/ ZOOLOGY 953 - INTRODUCTION TO ECOLOGY RESEARCH AT UWMADISON
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENTOM 990 - GRADUATE RESEARCH AND THESIS
1-12 credits.
Enroll Info: None
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

## ENVIRONMENTAL STUDIES - <br> GAYLORD NELSON INSTITUTE <br> (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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
ENVIR ST/ATM OCN/GEOSCI 102 - CLIMATE AND CLIMATE CHANGE 3 credits.

This course 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## ENVIR ST/AGROECOL/AGRONOMY/C\&E SOC/ENTOM 103 -

 AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE3 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 wihin a broader context of dynamic social and ecological relationships. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Lecture and discussion. Enroll Info:
Not open to those who have had Geosci 101, 100, or 109. Open to Fr
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Not open to students with credit for GEOG/ENVIR ST 337
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST 113 - ENVIRONMENTAL STUDIES: ENVIRONMENTAL HUMANITIES
3 credits.
What is "The Environment"? Starting with the idea that what is "environmental" are relations of the human and nonhuman, course offers a global perspective on environmental humanities, introducing fields like philosophy, ethics and religion, literature, fine arts, history, and anthropology. Answer questions such as, How are some "environments" rendered as "natural", or as "problems" in Environmental Studies? How do we understand the expressions of global environmentalisms in terms of difference: among persons, between groups, and with respect to nonhumans? Master key skills such as comparison to answer fundamental questions about diverse environmental experience worldwide. Enroll Info: None
Requisites: None
Course Designation: Breadth - Humanities
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST 115 - ENVIRONMENTAL HUMANITIES: ASIAN/PACIFIC PERSPECTIVES

3-4 credits.
Course 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. Course 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. Throughout the course we ask, how are environmental worldviews cast as the basis for action and understanding in the present? Enroll Info: None
Requisites: None
Course Designation: Breadth - Humanities
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
ENVIR ST 117 - GREENHOUSE ROOTS SEMINAR
1 credit.
GreenHouse residents will be challenged to think deeply about themselves and their place in the social and biophysical communities of which they are a part. We will read some classic and provocative essays to help us engage the meaning(s) of "sustainability" and to consider how our lifestyle and career choices impact other people and the environment. We will also take field trips to experience firsthand 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. Enroll Info: None
Requisites: Member of the GreenHouse Learning Community
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST/GEOG 120 - INTRODUCTION TO THE EARTH SYSTEM 3 credits.

Introduces students to how the Earth system works and what makes Earth livable. Through this course you will gain a deeper appreciation for how the atmosphere, oceans, life, and earth's surface interact to shape our local, regional and global landscapes. Many students take this course to fulfill their physical science requirement. Others use it as a gateway to majors and careers in Geography, Environmental Studies, and Environmental Science. Enroll Info: Not open to students with credit for ENVIR ST/GEOG 127
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST/HIST SCI/HISTORY 125 - GREEN SCREEN: ENVIRONMENTAL PERSPECTIVES THROUGH FILM <br> 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? This course will explore such questions as we 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017

## ENVIR ST/ILS 126 - PRINCIPLES OF ENVIRONMENTAL SCIENCE

 4 credits.This course relates principles of environmental science to our daily activities, with an eye to sustainability, conservation, and systems thinking. It 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Open to Freshmen not open to those with GEOG/ENVIR ST 120, 123, 124, or 125 credit or ILS 132 credit
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:

## None

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 Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

ENVIR ST 199 - DIRECTED STUDY
1-3 credits.
Independent work in environmental studies overseen by a qualified instructor. Enroll Info: None
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 2019
ENVIR ST/ENTOM 201 - INSECTS AND HUMAN CULTURE-A SURVEY COURSE IN ENTOMOLOGY
3 credits.
Importance of insects in man's environment, emphasizing beneficial insects, disease carriers, and agricultural pests that interfere with man's food supply. Environmental problems due to insect control agents. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## ENVIR ST/GNS 210 - CULTURES OF SUSTAINABILITY: CENTRAL, EASTERN, AND NORTHERN EUROPE <br> 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. Enroll Info:

## None

Requisites: None
Course Designation: Breadth - Humanities
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
ENVIR ST/MED HIST 213 - GLOBAL ENVIRONMENTAL HEALTH: AN INTERDISCIPLINARY INTRODUCTION
3 credits.
The course 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST 250 - INTRODUCTION TO SUSTAINABILITY SCIENCE

 3 credits.Course 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. Enroll Info: A sem of calculus or concurrent enrollment in MATH 136, 171, 211, 221 or equiv
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 Sustain - Sustainability
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. Content includes lectures as well as readings from the scientific literature, lay audience books, and current environmental news. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
ENVIR ST/BOTANY/ZOOLOGY 260 - INTRODUCTORY ECOLOGY 3 credits.

For nonbiology students: the relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs. Enroll Info: Open to Freshmen. Does not count toward Botany or Zoology major
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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? This course 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, course gives overview of some approaches in the environmental humanities related to philosophy, history, sociology and anthropology, and ethics. Fulfills requirement for Environmental Studies and Religious Studies degree programs. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. This course 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST 307 - LITERATURE OF THE ENVIRONMENT: SPEAKING FOR NATURE <br> 3 credits.

19th and 20th century British and American literature. Enroll Info: Sophomore, junior or senior standing only
Requisites: Sophomore, junior, or senior standing only
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 2020
ENVIR 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. Enroll Info: None
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: Summer 2020
ENVIR 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. Enroll Info: Sophomore standing
Requisites: None
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## ENVIR ST/M H R 310 - CHALLENGES \& SOLUTIONS IN BUSINESS SUSTAINABILITY <br> 3 credits.

Provides central knowledge and skills to tackle challenges at the intersection of business and sustainability. Study of the failures in market and decision making systems that lead to sustainability challenges, and learn to address these challenges on the policy, organizational, and individual level. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
ENVIR 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. Enroll Info: Intro course in biol; intro course in chem recommended
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 2020
ENVIR 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. Enroll Info: None
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
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

ENVIR ST/HISTORY 328 - ENVIRONMENTAL HISTORY OF EUROPE 3 credits.

This class 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. Enroll Info: Sophomore Standing 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST/ATM OCN/GEOG 332 - GLOBAL WARMING: SCIENCE AND IMPACTS <br> 3 credits.

Climate change is underway and will continue into the foreseeable future. This course offers a fundamental understanding of how and why global warming is happening, and what to expect in the future. Together, we will 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. Enroll Info: Geog/IES 120 or 127 or ATM OCN 100 or equivalent recommended. Freshmen permitted only 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## ENVIR ST/ATM OCN/GEOG/GEOSCI 335 - CLIMATIC ENVIRONMENTS OF THE PAST <br> 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. Enroll Info: None
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 2020

ENVIR ST/GEOG 337 - NATURE, POWER AND SOCIETY
3 credits
Explores the links between nature, power and society in today's world. The course considers the complex relationships between humans and the earth's resources, including food, energy, physical materials, water, biota, and landscapes; it considers issues linked to population and scarcity, resource tenure, green consumerism, political economy, environmental ethics, risks and hazards, political ecology, and environmental justice. Enroll Info: Sophomore standing. Not open to students who took Geog/ Env 139 in 2010-11, 2011-12 or 2012-13.
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: So st
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST/AMER IND/GEOG 345 - MANAGING NATURE IN NATIVE NORTH AMERICA <br> 3 credits.

Surveys the concepts, practices, and issues associated with natural resource management in American Indian communities. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. This course examines efforts to mitigate climate change. We will learn about initiatives that are being implemented through international treaties; national, state, and municipal government policies; corporate programs; and individual behavior. We will examine the advantages and disadvantages of each approach, their successes, and the obstacles they have faced. We will also evaluate various forms of climate activism as a means of pushing for meaningful action on climate change. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: Jr st or cons inst
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: Spring 2015

## ENVIR ST/ATM OCN 355 - INTRODUCTION TO AIR QUALITY

 3 credits.Air pollution is a complex environmental challenge, because it links chemistry and meteorology to engineering, law, policy, and public health. This class presents key ideas in air quality, with the goal of providing students from a range of backgrounds with a solid foundation in air quality to support a range of educational and career goals. This class will focus on reactive pollutants in the outdoor environment, especially gas and particle phase chemicals that react with human tissue to cause sickness and death. We will discuss the 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 for completeness. Non-reactive pollutants, especially carbon dioxide, will be discussed throughout the class to compare and contrast with reactive air pollutants. Students will complete a research-based project to develop skills relevant to air quality analysis. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Lectures and readings present 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. Enroll Info: Sophomore standing
Requisites: None
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: So st. An intro biology course strongly recommended
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Field trips, literature review, term paper, and personal observations required. Enroll Info: Upper class st; basic college- level biology or equiv (such as relevant physical sciences)

## 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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ENVIR ST/BSE 367 - RENEWABLE ENERGY SYSTEMS
3 credits.
Students will 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. Students will do 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. Enroll Info: None
Requisites: MATH 112 or 114 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST/PL PATH 368 - ENVIRONMENTAL LAW, TOXIC SUBSTANCES, AND CONSERVATION
2 credits.
Development of and need for "environmental law"; an introduction to the legal system; public and private rights in the environment; regulation of pesticides and toxic substances; environmental legislation and rulemaking; environmental impact statements; professionals as expert witnesses. No prior knowledge of law assumed. For scientists and others dealing with environmental issues in academia, industry and government. Enroll Info: So st
Requisites: None
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 2013

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. Enroll Info: None
Requisites: Sophomore standing or one course 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 2019
ENVIR ST/F\&W ECOL/G LE/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. Enroll Info: MATH 114 Sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: Envir St 301 or consent of instructor, sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015

## ENVIR ST 375 - FIELD ECOLOGY WORKSHOP

3 credits.
Lecture labs wholly in field 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. Enroll Info: Some basic biology ecology recommended; cons inst
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: Summer 2019
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. Meets with Civil Environmental Engineering 357. Enroll Info: None
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: Fall 2020
ENVIR ST 399 - DIRECTED STUDY
1-3 credits.
Independent work in environmental studies overseen by a qualified instructor. Enroll Info: None
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 2020
ENVIR ST 400 - SPECIAL TOPICS IN THE ENVIRONMENT: BIOLOGICAL ASPECTS OF ENVIR ST
1-4 credits.
Topics vary each term, within the scope of the environmental biological sciences. These may encompass areas such as conservation biology, environmental ecology, issues in ethnobotany and tropical ecology, environmental health, ecotoxicology, biodiversity, endangered resources, biological systems analysis, and field studies. Enroll Info: So st.
Authorization may be required
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: Yes, unlimited number of completions
Last Taught: Spring 2020

## ENVIR ST 401 - SPECIAL TOPICS: ENVIRONMENTAL PERSPECTIVES IN THE PHYSICAL SCIENCES <br> 1-4 credits.

Topics vary each term, within the scope of the physical environmental sciences. These may encompass 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. Enroll Info: So st. Authorization may be required

## 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: Yes, unlimited number of completions Last Taught: Spring 2020

ENVIR ST 402 - SPECIAL TOPICS: SOCIAL PERSPECTIVES IN ENVIRONMENTAL STUDIES
1-4 credits.
Topics vary each term, within the scope of the environmental social sciences. These may include issues in environmental policy, law, economics, land use, sustainability, food systems, energy policy, conflict resolution, environmental justice, and international development. Enroll
Info: So st. Authorization may be required
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 2020

ENVIR ST 404 - SPECIAL TOPICS: HUMANISTIC PERSPECTIVES IN ENVIRONMENTAL STUDIES
1-4 credits.
Topics vary each term, within the scope of the environmental humanities. These may encompass themes in environmental ethics, literature, art, film, aesthetics and design, history, and indigenous knowledge. Enroll Info: So st. Authorization may be required

## 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: Fall 2020

## 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. Enroll Info: None Requisites: Sophomore standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST/GEOSCI 411 - ENERGY RESOURCES

3 credits.
Sources, availability of fuels. Energy conversion and efficiency. Consumption patterns and trends. Environmental consequences of energy production and use. Policy considerations and alternatives. Enroll Info: Crse in college level math a crse in phy sci or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Sophomore standing or ZOOLOGY/BOTANY/ENVIR ST 260
Course Designation: Breadth - Either Biological Science or Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Natural Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST/HISTORY/LEGAL ST 430 - LAW AND ENVIRONMENT: HISTORICAL AND CONTEMPORARY PERSPECTIVES <br> 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
ENVIR ST/C\&E SOC/GEOG 434 - PEOPLE, WILDLIFE AND LANDSCAPES 3 credits.

This course explores the relationship between humans and wildlife amidst diverse landscapes, both historic and contemporary, tropical and temperate. We study how humans shape wild animal populations by modifying physical environments, and by hunting, domesticating and introducing species. Enroll Info: Geog/ENVIR ST/GEOG 339
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

ENVIR ST/GEOG 439 - US ENVIRONMENTAL POLICY AND REGULATION 3-4 credits.

This course covers a broad cross-section of American environmental policy by focusing on specific statutes and policy arenas. In this course we will survey 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. 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. This course will maintain 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. Enroll Info: None
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Undergraduate students with 3 credits in Philosophy or Institute of Environmental Studies or graduate student in IES Program
Course Designation: Breadth - Either Humanities or Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: Math 210, 211, 221 or equiv or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: SPANISH 223 and 224
Course Designation: Breadth - Humanities
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2019
ENVIR ST/F\&W ECOL/HISTORY 452 - WORLD FOREST HISTORY
3 credits.
Examines world forest history, with attention to links between societal change and forest change. Examines how different peoples have used or abused the forest, how societies have struggled to establish policies governing forests, and how perceptions of forests have evolved. Enroll Info: None
Requisites: None
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 2012
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. Enroll Info: So st
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
Grad 50\% - Counts toward 50\% graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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 firsthand historiographical research experience and training in writing for public web audiences. Enroll Info: None
Requisites: Sophomore standing or one course 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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 teaching students skills they can use to interpret landscape history themselves.

## Enroll Info: None

Requisites: Sophomore standing or one course 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
Sustain - Sustainability
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. Enroll Info: A course in biology; Jr st
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST/PHYSICS 472 - SCIENTIFIC BACKGROUND TO GLOBAL ENVIRONMENTAL PROBLEMS <br> 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. Enroll Info: None
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/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. Enroll Info: Jr st, a course in biology
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST 506 - MODELING AND ANALYSIS OF ENVIRONMENTAL SYSTEMS
3 credits.
Systems modeling; applications to environmental problems; systems methods. Enroll Info: None
Requisites: None
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
Sustain - Sustainability
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.

## Enroll Info: None

Requisites: (ZOOLOGY/BIOLOGY 101 and 102) or 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 2020
ENVIR ST/ZOOLOGY 511 - ECOLOGY OF FISHES LAB
2 credits.
Anatomy and taxonomy of Wisconsin fishes and projects in fish ecology. Enroll Info: None
Requisites: Zoo 511 - needs Zoo 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 2020
ENVIR ST/HIST SCI/MED HIST 513 - ENVIRONMENT AND HEALTH IN GLOBAL PERSPECTIVE
3 credits.
Explores the historical relationships between environmental change and human health from the 17th through the 20th century. Topics include colonialism and disease, medical geography, urban pollution and reform, workplace hazards, environmental risk, and the anti-toxics and environmental justice movements. Enroll Info: Jr st
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## ENVIR ST/F\&W ECOL 515 - NATURAL RESOURCES POLICY

 3 credits.This course examines natural resources policy and law in the United States relating to forests, wildlife, and other natural resources. The course investigates the policy-making process and the role of science, values, property, economics, and justice in the development of federal and state resources policy. Students are trained in professional written and oral communication and ethical engagement in resources policy and administration. Enroll Info: F\&W ECOL 379, or 410, or consent of instructor
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Junior standing and ATM OCN 101, ATM OCN 252 or ATM OCN/GEOG 323, and BIOLOGY/ BOTANY/ZOOLOGY 152
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: 3 cr of philos or 3 cr in a biological science
Requisites: None
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 2018

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. Enroll Info: Jr st or one year calculus-based college physics or introduction to weather and climate; or cons inst
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
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 GIS data, applications, analytical tools, and implementation issues. Enroll Info: None
Requisites: GEOG/CIV ENGR/ENVIR ST 377
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
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. Enroll Info: None
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 2018

## ENVIR ST/GEOG 534 - ENVIRONMENTAL GOVERNANCE: MARKETS, STATES AND NATURE <br> 3 credits.

This class is designed to help students answer real-world questions of how the environment is managed and governed through state policy, economics, and social institutions. We will cover strategies within and outside of the formal institutions of government, and extend the discussion to the commodification of nature and the use of science to understand and govern the environment. The last third of the class will consist of students engaging with case studies of environmental governance in water, carbon, species, and urban sustainability. Enroll Info: None
Requisites: ENVIR ST/GEOG 339, ENVIR ST/GEOG 439, or ENVIR ST/ F\&W ECOL 515
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016
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. Enroll Info: Math 212, PHYSICS 202, or cons inst

## 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
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. Enroll Info: Geog/IES 339 or equiv
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST/C\&E SOC/SOC 540 - SOCIOLOGY OF INTERNATIONAL DEVELOPMENT, ENVIRONMENT, AND SUSTAINABILITY <br> 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. A 5 -week practicum with applications to: agriculture and forestry, geology and soils, water quality, and urban and regional planning. Enroll Info: Civ Engr/Envir St/Forestry 303 or authorization
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Sophomore standing
Requisites: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST/POP HLTH 560 - HEALTH IMPACT ASSESSMENT OF GLOBAL ENVIRONMENTAL CHANGE

3 credits.
Covers contemporary methods of impact assessment in a framework to address global environmental health threats (e.g., global climate change, deforestation and biodiversity loss, and urban sprawl). Issues dovetail well (but do not overlap) with Introduction to Environmental Health. Enroll Info: None
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 2019
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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

ENVIR ST 600 - ENVIRONMENTAL STUDIES MAJOR CAPSTONE 3 credits.

Investigation of a selected complex interdisciplinary environmental problem, e.g., desertification; energy in an age of scarcity; world hunger. Readings, papers, individual and team research, intensive discussions.
Enroll Info: Senior standing enrollment in the Envir Studies Certificate
Program; authorization required
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
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST/GEN BUS 601 - SYSTEMS THINKING AND SUSTAINABLE BUSINESSES
3 credits.
Introduces students to the concept of systems thinking so as to allow them to use systems to bring about large scale social change, both within the business community and within our societal infrastructure. Enroll Info: None
Requisites: Junior standing and declared in an undergraduate School of Business major or Environmental Studies
Repeatable for Credit: No
Last Taught: Spring 2014
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. Enroll Info: Junior or Senior standing seeking Sustainability Certificate, or consent of instructor
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015
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. Enroll Info: An ecology crse (eg, Botany/ZOOLOGY/BOTANY/F\&W ECOL 460)
Requisites: None
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 2020

## ENVIR ST/A A E/F\&W ECOL 652 - DECISION METHODS FOR NATURAL RESOURCE MANAGERS <br> 3-4 credits.

Applications of quantitative methods, including optimization and simulation, to the management of natural resources, especially forests.

## Enroll Info: None

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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: Jr st or cons inst
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
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
ENVIR ST 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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

ENVIR ST 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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 2010
ENVIR ST 691 - SENIOR THESIS
1-3 credits.
Enroll Info: None
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.
Enroll Info: None
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 "handson" GIS experience. Enroll Info: None
Requisites: LAND ARC 211 or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
ENVIR ST 699 - DIRECTED STUDY
1-3 credits.
Enroll Info: None
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 2020

## ENVIR ST 707 - PROFESSIONAL SKILLS FOR GLOBAL SYSTEMS ANALYSIS <br> 1 credit.

Trains students in interdisciplinary skills needed to research environmental sustainability and vulnerability in linked human, nonhuman natural systems. Instruction involves communication simulations, facilitation training, cross-disciplinary listening exercises, and other hands-on activities. Content is linked with Environmental Studies 506.
Enroll Info: Con reg in ENVIR ST 506 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
ENVIR ST/M H R 710 - CHALLENGES \& SOLUTIONS IN BUSINESS

## SUSTAINABILITY

3 credits.
Provides students with central knowledge and skills to tackle challenges at the intersection of business and sustainability. Students will study the failures in market and decision making systems that lead to sustainability challenges, and learn how to address these challenges on the policy, organizational, and individual level. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST/HIST SCI/MED HIST 713 - STUDIES IN ENVIRONMENT AND

## HEALTH

1 credit.
Advanced readings in primary and secondary literature of environment and health, with emphasis on current historiographic issues. Enroll Info:
Grad st, or con reg in Hist Med 513 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016
ENVIR ST/CIV ENGR/URB R PL 717 - WATER RESOURCES
MANAGEMENT PRACTICUM PLANNING SEMINAR I
1 credit.
This is the first of two seminars used for planning the activities of the Summer Session Water Resources Management Practicum (ENVIR ST/ CIV ENGR/URB R PL 719). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST/CIV ENGR/URB R PL 718 - WATER RESOURCES <br> MANAGEMENT PRACTICUM PLANNING SEMINAR II <br> 2 credits.

This seminar is used for planning the field work, analysis and reporting of the Summer Session Water Resources Management Practicum (ENVIR ST/CIV ENGR/URB R PL 719). Enroll Info: Adv Grad standing or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Envir St/Civ Engr/URB R PL/ CIV ENGR/ENVIR ST 718 or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY/BOTANY/ ENVIR ST 260) and (PHYSICS 103 or CHEM 103, 109 or 115); or graduate/professional standing
Course Designation: Grad 50\%-Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: ATM OCN 640 or 1 yr calc-based college physics MATH 234
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
ENVIR ST 806 - LOCAL \& REGIONAL APPROACHES TO SUSTAINABILITY \& VULNERABILITY
3 credits.
Evaluates what local-scale, place-based and social science / humanities approaches offer to analyses of environmental change, sustainability and vulnerability. Stresses interdisciplinary, both through content and through assignments that require students to bring their own disciplinary training and work together in teams. Enroll Info: ENVIR ST 506 ENVIR ST 707 or cons inst, and con reg in ENVIR ST 807
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2012
ENVIR ST 807 - PROFESSIONAL SKILLS FOR REGIONAL AND LOCAL SUSTAINABILITY
1 credit.
Trains students in the skills needed to research environmental vulnerability and sustainability from a regional or local perspective. Training in qualitative methods, cross-disciplinary presentation, and other hands-on activities. Content will be linked with ENVIR ST 806. Enroll Info: Envir St 506 ENVIR ST 707 or cons instr, and con reg in ENVIR ST 806 Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2012

## ENVIR ST 808 - INTEGRATED RESEARCH METHODS \& PROF SKILLS: HUMANS \& THE GLOBAL ENV <br> 4 credits.

Trains students to conduct research, review alternatives, and promote solutions to environmental problems through team-based projects. Teams integrate research across scales and disciplines and learn to present and publicize their ideas to peers, media, and the public. Enroll Info: ENVIR ST 506, ENVIR ST 707, ENVIR ST 806, ENVIR ST 807 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
ENVIR ST/PUB AFFR/URB R PL 809 - INTRODUCTION TO ENERGY

## ANALYSIS AND POLICY

3 credits.
Interdisciplinary seminar for the Energy Analysis and Policy Curriculum. Strategy and policy problems in energy policy, both national and international. Enroll Info: Grad st admission to Energy Anal and Policy curric or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
ENVIR ST/PUB AFFR/URB R PL 810 - ENERGY ANALYSIS SEMINAR 1-3 credits.

Interdisciplinary seminar for the Energy Analysis and Policy Curriculum. Quantitative energy content and energy flows as an aid to problem analysis and policy formulation. Enroll Info: Grad st admission to Energy
Anal and Policy Curric or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
ENVIR 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. Enroll Info: None
Requisites: 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

## ENVIR 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
ENVIR 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
ENVIR 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

ENVIR 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. Enroll Info: None
Requisites: Graduate/professional standing and (PUB AFFR 818 and 880), or 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 2020
ENVIR ST 900 - SEMINAR
1-3 credits.

Special topics selected with each offering. Enroll Info: Grad st; authorization may be 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 2020

ENVIR ST 901 - GRADUATE ORIENTATION SEMINAR
1 credit.
This course provides incoming graduate students with an 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. Enroll Info: None
Requisites: Declared in the Environment \& Resources or Water Resources Management graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST/ATM OCN/BOTANY/CIV ENGR/GEOSCI/ZOOLOGY 911 LIMNOLOGY AND MARINE SCIENCE SEMINAR
1 credit.
Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst
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

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. Enroll Info: None
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.
This course introduces graduate students from a wide array of departments and programs to different disciplinary and interdisciplinary methods for studying past environmental change and the human cultural contexts within which such change occurs. The course explores the disparate forms of evidence that can be used to reconstruct past environmental changes and their human meanings. The course also strives to 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 departments and programs can work together while also getting to know faculty members associated with the Center for Culture, History, and Environment (CHE). Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ENVIR ST/URB R PL 923 - SEMINAR-LAND PROBLEMS:
INSTITUTIONAL DEVELOPMENT
2-3 credits.
Land tenure and utilization research and policy problems. Enroll Info: None
Requisites: 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. Enroll Info: None
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 <br> DEVELOPMENT <br> 3 credits.

The goal of this seminar-style class is to explore the ways remote sensing data are being used within an international development context, broadly defined. While the typical goal of seminar-style graduate-level courses is understand the theory and underpinnings of a given literature, this course is unique in that we will 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. We will also pay particular attention to how the application of remote sensing data helped change policy in different countries across the globe. Students will be expected to read papers from the academic literature, synthesize this information by contributing to weekly discussion questions, participate actively in discussion, and complete one project paper. Enroll Info: None
Requisites: LAND ARC/ENVIR ST/F\&W ECOL/G L E/GEOG/GEOSCI 371 Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. This course 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. We will seek to ground our discussions in concrete examples of educational practice. We will also consider historical and contemporary critiques of environmental education. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR 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. Enroll Info: None
Requisites: Declared in the Environmental Observation and Informatics option of the Environmental Conservation graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## ENVIR 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. The course includes attention to the interactions of humans with nature, and how conservation science is used to formulate policy and guide conservation actions. Enroll Info: None
Requisites: Declared in the Environmental Conservation professional master's program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
ENVIR ST/AGRONOMY/ATM OCN/BOTANY/ENTOM/F\&W ECOL/GEOG/ ZOOLOGY 953 - INTRODUCTION TO ECOLOGY RESEARCH AT UWMADISON
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR 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. Enroll Info: None
Requisites: LAND ARC/ENVIR ST/F\&W ECOL/G LE/GEOG/GEOSCI 371 and graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR 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. Enroll Info: None
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 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. Enroll Info: None
Requisites: 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST 972 - CONSERVATION PLANNING

4 credits.
Preparation of students to plan, monitor and evaluate the effectiveness of conservation projects and programs. Systematic and adaptive processes of conservation planning will be learned through lectures, readings, discussions, and work in small groups to prepare a conservation plan and/or review case study projects (e.g., a protected area, a landscape) with a conservation organization. Enroll Info: Students must be accepted into the Environmental Conservation professional master's program Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ENVIR ST 974 - ENVIRONMENTAL CONSERVATION COHORT SEMINAR

 1 credit.Professional development course for incoming Environmental Conservation graduate students. Introduces students to important aspects of communication, collaboration, and professional practice as they relate to Environmental Conservation. Enroll Info: Students must be accepted into the Environmental Conservation professional master's program
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## ENVIR ST 975 - ENVIRONMENTAL CONSERVATION LEADERSHIP SEMINAR <br> 1 credit.

Professional development course for Environmental Conservation graduate students. Introduces students to important aspects of communication, negotiation, and cross-cultural professional practice as they relate to Environmental Conservation. Enroll Info: Students must be accepted into the Environmental Conservation professional master's program and have completed ENVIR ST 974
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

## ENVIR ST 976 - THE PRACTICE OF CONSERVATION BIOLOGY AND

 SUSTAINABLE DEVELOPMENT1 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 agenncy persons. Enroll Info: Grad st in IES program or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## ENVIR ST 977 - SUSTAINABLE DEVELOPMENT - INTEGRAL <br> PERSPECTIVE

3 credits.
This interdisciplinary graduate seminar has four main objectives: 1) review core concepts and history of sustainable development; 2) introduce students to innovative frameworks to sustainable development, including integral framework, institutional analysis, and the often overlooked cultural, philosophical and psychological underpinnings of environmental decision-making; 3) analyze case studies and examples through the lens of the frameworks presented; 4) provide a forum for graduate students to present their own research interests and examples regarding sustainable development. Some of the examples and case studies discussed are from Latin America, but will also include some from Wisconsin and the global level depending on the group's interests. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ENVIR ST 978 - ENVIRONMENTAL CONSERVATION TOOLS MODULES 1 credit.

Tools modules for Environmental Conservation graduate students. Modules will 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. Enroll Info: Students must be accepted into the Environmental Conservation professional master's 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 2020

## ENVIR ST 979 - ENVIRONMENTAL CONSERVATION PROFESSIONAL PRACTICE <br> 3 credits.

This course provides an online environment for the development and practice of the skills needed to be an environmental conservation professional and leader. It will help students analyze options and make good professional conservation judgments in complex and uncertain environmental, political, and economic settings. It will also give students the tools needed to assess and revise those judgments. The course will include exercises on the politics of environmental decisions, internal and external communication strategies, and program development and assessment strategies. The course builds on earlier classes' discussions of online communication and presentation skills. Enroll Info: Enrolled in Environmental Conservation professional master's program and ENVIR ST 975
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## ENVIR ST/ATM OCN/BOTANY/F\&W ECOL/GEOG/GEOSCI/ZOOLOGY 980 - EARTH SYSTEM SCIENCE SEMINAR <br> 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. Enroll Info: None
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.
Enroll Info: None
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

## ENVIR ST 993 - APPROACHES TO INTERDISCIPLINARY ENVIRONMENTAL RESEARCH

2 credits.
A course to assist students undertaking interdisciplinary research. Preparation of a proposal or manuscript to professional standards. A review of other topics relevant to interdisciplinary work. Formal presentation of a research plan or other product to peers for review and evaluation. Enroll Info: Land resources major. Authorization may be required
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. Enroll Info: None
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

## FAMILY MEDICINE (FAM MED)

## FAM MED 699 - DIRECTED STUDY

1-5 credits.
Directed study projects as arranged with faculty member. Enroll Info: None
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 2020
FAM MED 701 - PERSPECTIVES IN MULTIDISCIPLINARY CLINICAL \& TRANSLATIONAL RESEARCH
2 credits.
An overview of clinical investigation, including translational research; observational, experimental and quasi experimental designs; efficacy and effectiveness; behavioral and community interventions; qualitative methods; educational research; quality assurance; health economics; bioethics; pharmacotherapy trials; health disparities, and patents. Enroll Info: Introductory statistics course
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
FAM MED 711 - THE HEALER'S ART
1 credit.
The class explores relationship-centered care in the medical profession. Topics will include the importance of holistic self-care, methods of sharing, processing and responding to grief and the concepts of service and calling in medicine. Enroll Info: 1 st yr Med st or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
FAM MED 712 - HEALLTH CARE IN DIVERSE COMMUNITIES 1 credit.

This elective is an 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. Enroll Info: Stdts enrolled in a prof degree prgm cons inst
Requisites: Declared in Doctor of Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

FAM MED 790 - RURAL PUBLIC HEALTH AND COMMUNITY PROJECTS FOR PHASE 3 WARM STUDENTS
2 credits.
Designed exclusively for medical students in the Wisconsin Academy of Rural Medicine (WARM) program, will provide an opportunity for students to continue or enhance work on their longitudinal community projects during Phase 3 of medical school through a self-directed learning experience. This elective will be planned well in advance. It will consist of a public health-related project that has been approved by the course instructor and community projector mentor. Enroll Info: None
Requisites: Declared in Wisconsin Academy of Rural Medicine (WARM) program and MED SC-M 811
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, for 1 number of completions
Last Taught: Fall 2020

## FAM MED 910 - RESEARCH AND INDEPENDENT STUDY ELECTIVE IN FAMILY MEDICINE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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

FAM MED 921 - CLINICAL CLERKSHIP IN FAMILY MEDICINE-APPLETON 2-12 credits.

Enroll Info: 4th yr Med st
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

## FAM MED 922 - CLINICAL CLERKSHIP IN FAMILY MEDICINE-EAU CLAIRE <br> 2-12 credits.

Enroll Info: 4th yr Med st
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

FAM MED 923 - CLINICAL CLERKSHIP IN FAMILY MEDICINE-WAUSAU 2-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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

## FAM MED 924 - CORRECTIONAL SYSTEM HEALTHCARE ELECTIVE IN

 FAMILY MEDICINE2-8 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. Enroll Info: None
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 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. Enroll Info: None
Requisites: 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

## FAM MED 927 - RURAL AND COMMUNITY CLINICAL ELECTIVE IN FAMILY MEDICINE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## FAM MED 931 - ADDICTIVE DISORDERS MANAGEMENT IN FAMILY MEDICINE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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

FAM MED 937 - FAMILY MEDICINE UW HOSPITAL SUB-INTERNSHIP 1-6 credits.

Service accepts patients for admission from the four Department of Family Medicine residency training clinics, as well as 12 community based Family Medicine clinics. The average service census is 11 patients. Enroll Info: Successful completion of the third year UWSMPH curriculum 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: Fall 2020

## FAM MED 938 - HOSPICE \& PALLIATIVE CARE ELECTIVE IN FAMILY MEDICINE <br> 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. Enroll Info: None
Requisites: 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

FAM MED 939 - HEART IM (HUMANISTIC ELECTIVE IN ACTIVISM, REFLECTIVE TRANSFORMATION, AND INTEGRATIVE MEDICINE) 4 credits.

HEART (Humanistic Elective in alternative medicine, Activism, and Reflective Transformation) is an AMSA (American Medical Student Association) sponsored, month long elective for fourth-year medical students. Twenty-five medical students from across the nation will come together to live in an intentional community at a retreat center for the month of April each year in the California redwoods to explore the nature of healing, activism, self-care and personal reflection. Five medical student leaders are chosen through a competitive application process each year to organize the rotation under the guidance of a group of faculty mentors. Experts in integrative medicine, nutrition, humanism, non-violent communication, health policy, and public health will lead didactic and experiential workshops throughout the month. Students will also participate in a community service project as a way to synthesize and act upon core aspects of the curriculum in the surrounding community. The faculty who participate in this rotation come from institutions from around the county, including the University of California-San Francisco, University of Minnesota, University of Florida, as well as core integrative medicine faculty from the University of Wisconsin. Independent donors and student tuition provide funds, and these cover on-site transportation, meals, housing, and all required curricular activities. Enroll Info: 4th year medical student
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.
Welcome to Community Based Care for the Elderly, an interdisciplinary geriatric teaching service. The nursing home is an ideal setting to teach geriatrics at the interface of hospital and home, where $45 \%$ of elderly spending some time of their life. Didactic lectures are followed by bedside rounds, where geriatric topics are applied. Exposure to geriatric community and clinic experiences round out the rotation. Enroll Info:
Fourth Year Students: successful completion of Third Year curriculum Third Year Students: upon recommendation of course director Requisites: Graduate/professional standing
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None 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 <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in the Farm \& Industry Short Course program Repeatable for Credit: No
Last Taught: Spring 2020

## FISC 23 - SAFE AND EFFECTIVE USES OF PESTICIDES IN AGRONOMIC CROPS <br> 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in the Farm Industry Short Course program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Foundations of Farm Management certificate program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 machineryrelated injuries and operating practices; hazards to children; animalrelated 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. Enroll

## Info: None

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. Enroll Info: None
Requisites: Declared in Foundations of Farm Management certificate program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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. Enroll Info: None
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; farmernatural resource use conflicts; and the impacts of international trade agreements and export policies. Enroll Info: None
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. Enroll Info:

## None

Requisites: Declared in Foundations of Farm Management certificate program
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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-born illnesses from farm to market. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in the Farm \& Industry Short Course program
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
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). Enroll Info: None 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 <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Foundations of Farm Management certificate program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: None
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.
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. Enroll Info: None
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. Enroll Info: None
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). Enroll Info: None
Requisites: Declared in the Farm \& Industry Short Course program
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in the Farm \& Industry Short Course program
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: FISC 051
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in the Farm Industry Short Course program Repeatable for Credit: No

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 handson experience in evaluating, slaughtering, and cutting beef and pork.
Lamb processing and manufacturing of processed meat items will be demonstrated. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in the Farm \& Industry Short Course program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: FISC 119 and 020
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: FISC 119
Repeatable for Credit: No
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. Enroll Info: None
Requisites: FISC 119
Repeatable for Credit: No

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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in the Farm \& Industry Short Course program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Foundations of Farm Management or Farm and Equipment Operations certificate program
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None
Requisites: Declared in Crops and Soils Management or Diversified Ag Operations certificate program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Foundations of Farm Management or Farm and Equipment Operations certificate program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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/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. Enroll Info: None
Requisites: (ECON 101, 111, or A A E 215) and (ACCT I S 100 or 300 or concurrent enrollment in ACCT I S 100) and (GEN BUS 306, ECON 310, STAT/MATH 309, 431, STAT 224, 301, 302, 309, 311, 324, 371, or PSYCH 210, or concurrent enrollment); or Business Exchange student 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 2020
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. Enroll Info: None
Requisites: FINANCE/ECON 300 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: FINANCE/ECON 300 and (MATH 213, 222, or 276) and (GEN BUS 307, ACT SCI 654, ECON 410, STAT/MATH 310, STAT 312, or 333 or concurrent enrollment); or member of 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: Fall 2020

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. Enroll Info: None
Requisites: FINANCE/ECON 300 and ACCT I S 301 and (MATH 213, 222, or 276) and (GEN BUS 307, ACT SCI 654, ECON 400, 410, STAT/ MATH 310, STAT 312, or 333 or concurrent enrollment); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## FINANCE 330 - DERIVATIVE SECURITIES

3 credits.
Pricing and uses of the most common derivatives including options, forward contracts, futures contracts, and swaps. Enroll Info: None
Requisites: FINANCE/ECON 300 and ACCT I S 301 and (MATH 213, 222, or 276) and (GEN BUS 307, ACT SCI 654, ECON 400, 410, STAT/ MATH 310, STAT 312, or 333 or concurrent enrollment); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: FINANCE 330 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Spring 2020

## FINANCE 365 - CONTEMPORARY TOPICS

1-3 credits.
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## FINANCE 399 - READING AND RESEARCH-FINANCE

1-6 credits.
Individual work suited to the needs of undergraduate students may be arranged with faculty member. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: FINANCE/ECON 300 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info:

## None

Requisites: Concurrent enrollment in ECON/FINANCE 300 or member of a Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: FINANCE/ECON 300 and (MATH 213, 222, or 276); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: FINANCE/ECON 300, ACCT I S 301, and (MATH 213, 222, or 276)

Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: FINANCE 410
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## FINANCE 635 - SECURITY ANALYSIS

3 credits.

Financial analysis for selection of securities that are currently either under- or over-valued. Enroll Info: None
Requisites: FINANCE/ECON 300 or FINANCE 700
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (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 2020

## 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.

## Enroll Info: None

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 2020
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. Enroll Info: None
Requisites: (FINANCE 700 and GEN BUS 704) or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: FINANCE 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

FINANCE 726 - VALUATION AND CORPORATE INVESTMENT DECISIONS 3 credits.

Theory and practice of financial valuation for investment decisions: present value, modeling cash flows, hurdle rates, financial multiples, valuing private firms, real options. Enroll Info: None
Requisites: FINANCE 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015
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 exchangetraded 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
FINANCE 735 - INTRODUCTION TO APPLIED SECURITY ANALYSIS 2 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. Enroll Info: None
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 2017
FINANCE 736 - INTRODUCTION TO APPLIED PORTFOLIO MANAGEMENT
2 credits.
Focuses on portfolio management, including development and implementation of the decision making process. Enroll Info: None
Requisites: FINANCE 735
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info: None
Requisites: (FINANCE 700 and GEN BUS 704) or member of Business
Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: FINANCE 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
FINANCE 755 - CORPORATE RESTRUCTURING \& REORGANIZATION 3 credits.

Financial policy decisions such as working capital management, dividend policy, capital structure and cost. Case studies emphasized. Enroll Info:

## None

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. Enroll Info: None
Requisites: (FINANCE 700 and GEN BUS 704) or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
FINANCE 765 - CONTEMPORARY TOPICS
1-4 credits.
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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

FINANCE 830 - ADVANCED DERIVATIVE SECURITIES
3 credits.
This course covers the design of new financial securities, advanced techniques for pricing and measuring the risks of derivative securities, and strategies employing derivative securities. Applications include the pricing and use of swaps, mortgage-backed securities, exotic options, and corporate securities with embedded options. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## FINANCE 835 - APPLIED SECURITY ANALYSIS AND INVESTMENT

 MANAGEMENT I5 credits.

The management of an actual portfolio of investments. Students engage in security analysis, develop a portfolio policy, and participate in field research such as trips to interview the management of potential portfolio acquisitions. Enroll Info: None
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 2020
FINANCE 836 - APPLIED SECURITY ANALYSIS AND INVESTMENT MANAGEMENT II
4 credits.
Continuation of FINANCE 835. Enroll Info: None
Requisites: FINANCE 835
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Business PHD
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
FINANCE 970 - SEMINAR- INVESTMENTS (PH.D.)
3 credits.
Intensive study and critical examination of recent empirical and theoretical literature investments. Enroll Info: None
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 2020

FINANCE 971 - SEMINAR-CORPORATE FINANCE (PH.D.) 3 credits.

Intensive study and critical examination of recent empirical and theoretical literature in corporate finance. Enroll Info: None 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 2020
FINANCE 972 - TOPICS SEMINAR-FINANCE PHD
3 credits.
Special topics of current or emerging interest in financial economics. Enroll Info: None
Requisites: Declared in Business PHD
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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 2020
FINANCE 990 - FINANCE INDEPENDENT RESEARCH PHD THESIS
1-12 credits.
Individual work to complete dissertation requirement of Ph.D. program. Enroll Info: None
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
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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102 INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
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
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. Enroll Info: None
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

## 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. Enroll Info: None
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. Enroll Info: None
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

## FOLKLORE/ANTHRO/INTL ST/LINGUIS 211 - GLOBAL LANGUAGE ISSUES <br> 4 credits.

A series of modules, each showcasing one language and its culture. Each module tackles a major issue about language, such as extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality. Enroll Info: None
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
FOLKLORE 220 - THE FOLK TALE
3 credits.
Types of heroes, social functions, and tellers; tales from four cultures.
Enroll Info: None
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 2016

## 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. Enroll Info: None
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

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. Enroll Info: None
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: No
Last Taught: Fall 2014
FOLKLORE 320 - FOLKLORE OF WISCONSIN
3 credits.
Introduction to folk cultural groups and folklore forms of Wisconsin.
Enroll Info: Jr st or cons inst
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: Spring 2020
FOLKLORE/DANCE/THEATRE 321 - JAVANESE PERFORMANCE 2 credits.

Technique and practice of classical Javanese dance in its musical, historical and cultural contexts. Enroll Info: None
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
FOLKLORE/MEDIEVAL/RELIG ST/SCAND ST 342 - NORDIC

## MYTHOLOGY

3 credits.
Mythology, literature, ritual, traditions, medieval folklore, and religion from Nordic areas and Scandinavia. Enroll Info: None
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

FOLKLORE/LITTRANS/MEDIEVAL 345 - IN TRANSLATION: THE SCANDINAVIAN TALE AND BALLAD
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2020
FOLKLORE/LITTRANS/MEDIEVAL 346 - IN TRANSLATION: THE ICELANDIC SAGAS
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2017
FOLKLORE/LITTRANS 347 - IN TRANSLATION: KALEVALA AND FINNISH FOLK-LORE
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: None
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 2020

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. Enroll Info: So st

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: Spring 2017
FOLKLORE 399 - DIRECTED STUDY IN FOLKLORE FOR UNDERGRADUATES
1-3 credits.
Directed study on a folklore topic for undergraduates. Enroll Info: None 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 401 - MUSICAL CULTURES OF THE WORLD 3 credits.

Survey of selected musical cultures in Southeast Asia, Africa, East Asia, the Middle East, and the folk music of Europe and the Americas. Classification of musical instruments, theoretical systems, scale structures, role of music in society, relationship of music to other arts in their cultures. Enroll Info: None
Requisites: MUSIC 212
Course Designation: Breadth - Humanities
Level - Advanced
\&\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
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/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. Enroll Info: None
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.
Enroll Info: None
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 American Folklore-Ethnic Studies. Topics in historical or contemporary folklore and folklife pertaining to persistently marginalized racial or ethnic groups in the United States. Enroll Info: None
Requisites: None
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 2020

## 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. Enroll Info: None
Requisites: Junior standing and ANTHRO/AMER IND 314, FOLKLORE
344, FOLKLORE 100, FOLKLORE 230, or FOLKLORE 320
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 <br> 3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America. Enroll Info: None
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 2020
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. Requires fieldwork. Enroll Info: Jr, Sr, or Grad st, or prior coursework in folklore. Cons inst for motivated Fr So stdts
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: 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. Requires field and archival research. Enroll Info: Jr st
Requisites: None
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 2017

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. Enroll Info: Jr st or cons inst
Requisites: None
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 2018

## FOLKLORE/SLAVIC 444 - SLAVIC AND EAST EUROPEAN FOLKLORE

 3 credits.Oral traditional literature of Eastern Europe: ritual and lyric poetry, epic, and folktale. Enroll Info: None

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 premodern Scandinavian, Scottish, Welsh and Irish sagas, histories, talkes.
Discussion of the role of folklore in modern Celtic and Scandinavian
societies. Enroll Info: So st or above required, or cons inst
Requisites: None
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
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. Enroll Info: Jr st or cons inst
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: Fall 2018

FOLKLORE 460 - FOLK EPICS
3 credits.
Oral nature, structure, performance traditions, and epic ideology, from various world areas. Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2016

## FOLKLORE/GEN\&WS 467 - WOMEN AND POLITICS IN POPULAR CULTURE AND FOLKLORE <br> 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. Enroll Info: None
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

## FOLKLORE/GEN\&WS 468 - FEMINISM, FOLKLORE AND COMPARATIVE <br> \section*{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. Enroll Info: None
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

## FOLKLORE/AFRICAN 471 - ORAL TRADITIONS AND THE WRITTEN WORD <br> 3-4 credits.

Analyses and comparisons of African oral narrative-performances and African written literatures. Enroll Info: AFRICAN/FOLKLORE 210, 402, or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## FOLKLORE/L IS 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, audiovisual productions, and digital archival collections. Enroll Info: None
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

## FOLKLORE 491 - PRACTICUM IN PUBLIC FOLKLORE

1-3 credits.
Offers professional experiences to qualified students who work as interns with a public agency or a private non-profit organization involved in public folklore projects. Enroll Info: None
Requisites: Junior standing or higher and FOLKLORE/L I S 490 required
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: Crse in anthro or folklore or cons inst

## 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 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. Enroll Info: None
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 2012

## FOLKLORE 517 - THE IRISH TRADITION

3 credits.
Study of the Irish literary tradition from the Middle Ages to the present day, with an emphasis on folk culture and its influence. Enroll Info:
Sophomore standing
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: No
Last Taught: Fall 2018

## 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. Enroll Info: Sophomore standing
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: 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. Involves field work and/or archival research. Enroll Info: ANTHRO 300 or FOLKLORE/
GNS 200 or cons inst
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: Spring 2018

FOLKLORE/COM ARTS 522 - DIGITALLY DOCUMENTING EVERYDAY COMMUNICATION
3 credits.
Teaches the use of digital recording technologies, archiving, and analysis of everyday communication and culture. Surveys scholarly approaches to everyday expressive communication. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Spring 2017

## FOLKLORE 530 - TOPICS IN FOLKLORE

1-3 credits.
The topic will vary with the instructor; may be repeated with different content. Enroll Info: Jr st or cons inst
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: Fall 2019

## FOLKLORE/MUSIC 535 - AMERICAN FOLK AND VERNACULAR MUSIC

 3 credits.An ethnographic, historical examination of immigrant and indigenous
"roots" musical genres (blues, hillbilly, powwow, polka, conjunto, etc.) in relation to technological, commercial, artistic, and socio-political forces in American life. Enroll Info: None
Requisites: Graduate/professional 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 2013

## FOLKLORE/ANTHRO/MUSIC/THEATRE 539 - THE FOLKLORE OF FESTIVALS AND CELEBRATIONS <br> 3 credits.

Survey of interdisciplinary literature on social/performative folklore aesthetics and environments by in-depth study of three festivals and ceremonies. Required field trips. Enroll Info: None
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 2014

## FOLKLORE 540 - LOCAL CULTURE AND IDENTITY IN THE UPPER MIDWEST <br> 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. Enroll Info: None
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 630 - SEMINAR ON AMERICAN FOLKLORE
3 credits.
Focuses on American folk and popular culture as it relates to expressive behavior using the work of folklorists, anthropologists, historians and literary scholars. Enroll Info: A lower level crse in folklore or anthro or cons inst
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: Spring 2014
FOLKLORE/ANTHRO 639 - FIELD SCHOOL: ETHNOGRAPHY OF WISCONSIN FESTIVALS
6-8 credits.
A review of key methodological and theoretical approaches for studying festivals, in situ observation of summer festivals and small town folk and ethnic museums, and supervised writing and photographic assignments. Enroll Info: None
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: Summer 2011

## FOLKLORE 699 - INDEPENDENT STUDY IN FOLKLORE (GRADUATE)

 1-3 credits.Independent study in an area related to folklore for graduate students.
Enroll Info: None
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

## 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. Enroll Info: None Requisites: 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. Enroll Info: None
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. Enroll Info: None

## 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 2020

## 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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2020

## FOOD SCI 289 - HONORS INDEPENDENT STUDY <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (MATH 112, 114 or 217) and (CHEM 103, 109 or 115) and (ZOOLOGY/BIOLOGY 101, 102, BOTANY/BIOLOGY 130, or ZOOLOGY/ BIOLOGY/BOTANY 151) or (BSE349 or concurrent enrollment)
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or 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: Spring 2020
FOOD SCI/AN SCI 321 - FOOD LAWS AND REGULATIONS
1 credit.
Food laws and regulations, regulatory and commerical grading standards used in the food industry. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: (MICROBIO 102 or MICROBIO 304) and 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 2020
FOOD SCI/MICROBIO 325 - FOOD MICROBIOLOGY
3 credits.
Principles of food preservation, epidemiology of foodborne illness, agents of foodborne illness, food fermentations and biotechnology. Enroll Info: None
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 2020

## FOOD SCI 375 - SPECIAL TOPICS

1-3 credits.
Subjects of current interest to undergraduates. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020

## FOOD SCI 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION <br> 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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
FOOD SCI 412 - FOOD ANALYSIS
4 credits.
Application of quantitative techniques to the determination of composition and quality of food products. Enroll Info: None
Requisites: (STAT 301, 323, or 371) and FOOD SCI 410
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: MICROBIO/FOOD SCI 325, FOOD SCI 410, and 440
Repeatable for Credit: No
Last Taught: Spring 2020

## FOOD SCI 437 - FOOD SERVICE OPERATIONS

3 credits.
Principles and methods of technical operations in quantity foodservice systems; menu planning, purchasing, production, service and cost control. Enroll Info: None
Requisites: Declared in Nutritional Sciences or Nutrition and Dietetics and FOOD SCI 301
Repeatable for Credit: No
Last Taught: Fall 2020

## FOOD SCI 438 - FOOD SERVICE OPERATIONS LAB

1 credit.
Procurement and production methods used to control costs in
foodservice operations; field trips. Enroll Info: None
Requisites: Concurrent enrollment in FOOD SCI 437
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
FOOD SCI/BSE/M E 441 - RHEOLOGY OF FOODS AND BIOMATERIALS 3 credits.

Fundamentals of rheology and rheological evaluations of food and biomaterials; structure-function relationships. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2016
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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: DY SCI/AN SCI/FOOD SCI/SOIL SCI 472
Course Designation: Sustain - Sustainability

## 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. Enroll Info: None
Requisites: FOOD SCI 410
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: FOOD SCI 602
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 2020
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. Enroll Info: None
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: Fall 2019

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.. Enroll Info: None
Requisites: FOOD SCI 432 or (BSE 461 or concurrent enrollment)
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: FOOD SCI 410 and FOOD SCI 432
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info:

## None

Requisites: BIOCHEM 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: Spring 2020
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. Enroll Info: Enrollment limited to students 21 years of age or older
Requisites: FOOD SCI 550 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: FOOD SCI 412 and 432
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: FOOD SCI 602
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Spring 2020
FOOD SCI 610 - FOOD PROTEINS
2 credits.
Protein structure and functions; techniques of protein isolation and characterization; functional properties important in food processing. Enroll Info: None
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 emhasis 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. Enroll Info: None
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 2020

## FOOD SCI 611 - CHEMISTRY AND TECHNOLOGY OF DAIRY PRODUCTS

 3 credits.Chemistry of milk components (i.e. protein, lipids, carbohydrate, salts, enzymes) with an emhasis on chemical and physical changes that occur mang the manufacture of a range of milk products (i.e. ice cream, butter, Requisites: FOOD SCI 410 or graduate/professional standing Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Last Taught: Spring 2020

FOOD SCI/BSE 642 - FOOD AND PHARMACEUTICAL SEPARATIONS 2-3 credits.

Basic principles of production-scale separation processes in the food and pharmaceutical industries including gravity sedimentation and centrifugation, extraction, adsorption, chromatography, precipitation, conventional and membrane filtration, crystallization, and drying. Third credit adds group term project, integrating principles with experiments, defined by students' interests. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
FOOD SCI 681 - SENIOR HONORS THESIS
2-4 credits.
Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

FOOD SCI 799 - PRACTICUM IN FOOD SCIENCE TEACHING
1-3 credits.
Teaching experience for PhD candidates. Enroll Info: None
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. Enroll Info: None
Requisites: 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

## FOOD SCI 900 - SEMINAR ADVANCED

1 credit.
Research literature and current departmental research. Enroll Info: None 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
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. Enroll Info: None
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

## 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. Enroll Info: So st, and consent of supervising instructor and academic advisor.
Requisites: None
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## F\&W ECOL 101 - ORIENTATION TO WILDLIFE ECOLOGY

1 credit.
Introduction to the Wildlife Ecology major and the profession of wildlife management/conservation. Emphasis on preparing students for a successful career. Enroll Info: None
Requisites: Declared in Wildlife Ecology major
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
F\&W ECOL 110 - LIVING WITH WILDLIFE - ANIMALS, HABITATS, AND HUMAN INTERACTIONS
3 credits.
A general survey course of wildlife and wildlife conservation for nonmajors. Basic characteristics and management of wildlife populations and habitats. Human perceptions and interactions with wildlife. Current issues in wildlife management and conservation. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## F\&W ECOL/BOTANY 250 - FORESTS AND HUMANS: FROM THE MIDWEST TO MADAGASCAR <br> 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 tradeoffs and conflicts. Look at the many real-world programs in place at the global, national, and local level to sustainably manage forests. Enroll Info: None
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 2020

## F\&W ECOL 289 - HONORS INDEPENDENT STUDY

1-2 credits.
Enroll Info: Enrolled in the CALS Honors Program Sophomore or Junior standing. INTER-AG 288
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.
Enroll Info: Open to Freshmen, Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: Stat 201 or Stat 224 or STAT 301 or equiv
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Forestry 300 or 410
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Sophomore standing an elementary course in Zoology
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Includes field trips
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152, 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

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. Enroll Info: High School biology. Open to Fr. Restricted to Wildlife Ecology majors
Requisites: Declared in Wildlife Ecology major
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None 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 2015
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. Enroll Info: So st. An intro biology course strongly recommended
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## F\&W ECOL/ENVIR ST/G L E/GEOG/GEOSCI/LAND ARC 371 INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING <br> 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. Enroll Info: MATH 114 Sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: Envir St 301 or consent of instructor, sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015
F\&W ECOL 375 - SPECIAL TOPICS
1-4 credits.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

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. Enroll Info: WI Ecol 318 or equiv
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

F\&W ECOL 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION
1-8 credits.
Enroll Info: So, Jr or Sr st and cons of supervising inst, advisor, and internship program coordinator
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: Summer 2020
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. Enroll Info: 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. Enroll Info: Jr st and basic zoology course
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: A 5 cr intro college crse in bot or equiv 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 2020

## 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. Enroll Info: F\&W ECOL 379, or cons inst
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ZOOLOGY/BOTANY/F\&W ECOL 460 or F\&W ECOL 550 or declared in Forest Science or Wildlife Ecology program 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
F\&W ECOL 411 - PRACTICES OF SILVICULTURE
1 credit.
Field and some laboratory experience in utilization of ecologicallybased 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. Enroll Info: None
Requisites: Concurrent enrollment or prior completion of F\&W ECOL 410 Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
F\&W ECOL 415 - TREE PHYSIOLOGY
3 credits.
Physiological basis of development of forest trees and stands, factors affecting tree growth. Enroll Info: Botany 350 or 500 or cons inst
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

F\&W ECOL 424 - WILDLIFE ECOLOGY SUMMER FIELD PRACTICUM 2 credits.

Two week field class emphasizing research and habitat management techniques through individual and group field work, tours, demonstrations and lectures. Class held in northern Wisconsin, transportation and lodging provided. Enroll Info: Open to wildlife ecol majors only, Jr/Sr st or cons inst
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2019
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. Enroll Info: None
Requisites: CHEM 104, 109, or 116, or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2013

## F\&W ECOL/ENVIR ST/HISTORY 452 - WORLD FOREST HISTORY

3 credits.
Examines world forest history, with attention to links between societal change and forest change. Examines how different peoples have used or abused the forest, how societies have struggled to establish policies governing forests, and how perceptions of forests have evolved. Enroll Info: None
Requisites: None
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 2012
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. Lecture and lab. Enroll Info: BOTANY 100, or BOTANY/BIOLOGY 130, or Botany/ZOOLOGY/BIOLOGY/ BOTANY 151-152, or Biocore 313
Requisites: Sophomore standing or special student classification 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 2020

## 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; lecture and lab. Enroll Info: Intro course in botany zoology, or Bot/Zoo 151-152, or Biocore 301 or 333 ; for biol sci majors only
Requisites: None
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: Fall 2020

## 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. Enroll Info: BOTANY/ BIOLOGY/ZOOLOGY 151152 or equivalent
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: Forestry 100 or college level plant ecology course
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2017

## F\&W ECOL/ENVIR ST 515 - NATURAL RESOURCES POLICY

 3 credits.This course examines natural resources policy and law in the United States relating to forests, wildlife, and other natural resources. The course investigates the policy-making process and the role of science, values, property, economics, and justice in the development of federal and state resources policy. Students are trained in professional written and oral communication and ethical engagement in resources policy and administration. Enroll Info: F\&W ECOL 379, or 410, or consent of instructor
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/ BOTANY 151 and 152 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/
BOTANY 151 and 152 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (PHYSICS 103, 201, 207, or 247) and (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
Sustain - Sustainability
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
F\&W ECOL/SURG SCI 548 - DISEASES OF WILDLIFE
3 credits.
This course is designed to provide students with an overview of the issues involved across a wide range of wildlife diseases, presented within the context of ecosystem health or "one health". The primary focus of the lectures will be on the biological, epidemiological, clinical, public health and, in some cases, sociopolitical ramifications of wildlife diseases. The course will cover 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 students with 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. Enroll Info: Junior standing
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 2020

## 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. Enroll Info: Five credit botany course 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## F\&W ECOL 551 - FOREST ECOLOGY LAB

1 credit.
Forest Ecology laboratory is the companion course for the lecture-based Forest Ecology (F\&W ECOL 550). The objective of the forest ecology laboratory is to review concepts that are presented in the classroom by exposing students to the key concepts and processes discussed in lecture that can best be seen in the field or illustrated with the use of ecosystem models. Enroll Info: None
Requisites: F\&W ECOL 550 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
Grad 50\% - Counts toward 50\% graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## F\&W ECOL/LAND ARC/ZOOLOGY 565 - PRINCIPLES OF LANDSCAPE ECOLOGY <br> 2 credits.

Landscape ecology emphasizes the importance of spatial patterns at broad scales. Concepts and applications are emphasized, especially for seniors and graduate students in applied natural resource fields. The course is also a prerequisite for Zoology/Forest Ecology 665, Advanced Landscape Ecology. Lecture format with discussion. Enroll Info: Botany/ Zoology/Forest 460, or Forest 550, a crse in stats, cons inst
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 Sustain - Sustainability
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. Enroll Info: None
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 2020

## 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. Enroll Info: None Requisites: (STAT 333 or 340 ) and M E/STAT 424; or HORT/F\&W ECOL/ STAT 572
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

## F\&W ECOL 577 - COMPLEXITY AND CONSERVATION OF WHITE-TAILED DEER <br> 3 credits.

Solving 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. Students will use deer management in Wisconsin as a case study to understand the interdisciplinary nature of wildlife management while gaining practical hands-on experiences. Enroll Info: None
Requisites: Junior standing and declared in the Wildlife Ecology program Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
F\&W ECOL 590 - INTEGRATED RESOURCE MANAGEMENT
3 credits.
Resource management planning in state and federal land management agencies. Students 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 major with junior or senior standing
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
F\&W ECOL 599 - WILDLIFE RESEARCH CAPSTONE
3 credits.
Capstone synthesis for wildlife ecology majors preparing themselves for a wildlife research career. Students 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.
Enroll Info: None
Requisites: Senior Standing or higher and Forest and Wildlife Ecology 561 required to enroll.
Course Designation: Sustain - Sustainability
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 or BOTANY/BIOLOGY 130 or
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 Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2016

## F\&W ECOL/AGRONOMY/ENTOM/M\&ENVTOX 632 - ECOTOXICOLOGY: THE CHEMICAL PLAYERS <br> 1 credit.

Introduction to natural and man-made toxins/toxicants, their distribution, transport, and fate in the environment. Enroll Info: None
Requisites: (CHEM 341 or 343 ) and ((BOTANY/BIOLOGY 130 and ZOOLOGY/BIOLOGY 102) or 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). Enroll Info: None
Requisites: M\&ENVTOX 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. Enroll Info: None
Requisites: M\&ENVTOX 633 or declared in Molecular and Environmental Toxicology, PhD program
Repeatable for Credit: No
Last Taught: Fall 2019
F\&W ECOL 635 - FOREST STAND DYNAMICS
1-2 credits.
Changes in forest species composition and structure at the stand and landscape level resulting from tree growth, competition, succession, and disturbance. Methods for reconstructing past stand development and forecasting future trajectories. Selected applications in forest management and natural areas management. Enroll Info: Crse in silviculture or ecology (BOTANY/F\&W ECOL/ZOOLOGY 460 or equiv) crse in stats. Sr or Grad st
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2012

## F\&W ECOL/BOTANY/ENVIR ST/ZOOLOGY 651 - CONSERVATION biology <br> 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. Enroll Info: An ecology crse (eg, Botany/ZOOLOGY/BOTANY/F\&W ECOL 460) Requisites: None
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 2020

## F\&W ECOL/A A E/ENVIR ST 652 - DECISION METHODS FOR NATURAL

 RESOURCE MANAGERS3-4 credits.
Applications of quantitative methods, including optimization and simulation, to the management of natural resources, especially forests. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
F\&W ECOL 655 - ANIMAL POPULATION DYNAMICS
3 credits.
Fluctuations of animal populations: techniques of study, documentation, controls. Enroll Info: WI Ecol 318 or equiv, and crse in stats
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
F\&W ECOL 658 - FOREST RESOURCES PRACTICUM
3 credits.
Field training and experience; exposure to forestry operations, equipment, procedures, and management problems. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2018

## 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. In this class, students will be introduced to climate change and its ecological impacts through engaging class discussions, online climate exercises, and group projects aimed at developing climate change adaptation plans. Enroll Info: Junior or Senior standing as a Forest Science or Wildlife Ecology major; graduate student standing; FW Ecol/Zoology/BOTANY/F\&W ECOL/ZOOLOGY 460; or consent of instructor
Requisites: Declared in Forest Science or Wildlife Ecology major with junior standing, or ZOOLOGY/BOTANY/F\&W ECOL 460, or graduate 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## F\&W ECOL/BOTANY/ZOOLOGY 672 - HISTORICAL ECOLOGY 2 credits.

Historical Ecology is an area of ecology that considers the importance of past events for current ecosystems. Concepts and applications are emphasized. Multidisciplinary emphasis, for seniors and graduate students in biological sciences, social studies, and humanities. Discussion format. Enroll Info: Graduate or senior standing and consent of instructor
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: No
Last Taught: Spring 2018
F\&W ECOL 675 - PROFESSIONAL DEVELOPMENT IN FOREST \& WILDLIFE ECOLOGY
1 credit.

This special topics course provides opportunities for students in Forest and Wildlife Ecology to receive additional training in professional development skills relevant to their careers in natural resources. Enroll Info: Forest Science or Wildlife Ecology major or graduate standing Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## F\&W ECOL 681 - SENIOR HONORS THESIS

2-4 credits.
Forestry research; an independent and original study guided by a staff member. Enroll Info: Hon candidacy
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2016
F\&W ECOL 682 - SENIOR HONORS THESIS
2-4 credits.
Continuation of 681. Enroll Info: Honors program candidacy Forest 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2017
F\&W ECOL 691 - SENIOR THESIS
2-4 credits.

Independent research guided by a faculty member (non-honors). Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2020
F\&W ECOL 692 - SENIOR THESIS
2-4 credits.

Independent research guided by a faculty member (non-honors).
Continuation of F\&W ECOL 691. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2019
F\&W ECOL 699 - SPECIAL PROBLEMS
1-4 credits.
Enroll Info: Sr st cons inst
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 2020

## F\&W ECOL/ENTOM 711 - MULTIVARIATE ANALYSIS OF ECOLOGICAL AND COMMUNITY DATA <br> 2 credits.

This course will examine some common methods of multivariate data analysis in ecology and environmental science. Often called "community data analysis," this class will cover methods for the analysis of complex, multidimensional datasets that are collected in the study of plant, invertebrate, fish, and bird communities. We will also address the concurrent analysis of the environmental factors that may drive community distributions. All of this provides the basis for predictive modeling of distributions across landscapes. General methods we will cover include ordination (PCA, DCA, NMDS, CCA), clustering (or classification), and other comparative analyses of data matrices (ANOSIM, Mantel tests). The "class" (better called a "workshop") is designed to be applied, meaning that the objective is for students to learn in a "hands-on" way how to use these tools, and the circumstances under which their uses are either appropriate or inappropriate. Enroll Info: None Requisites: Students must have Stats 571 or 572 to enroll, if a student feels that they have an equivalent background, they must get permission of the instructor to enroll
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015
F\&W ECOL 799 - PRACTICUM IN FORESTRY AND WILDLIFE ECOLOGYTEACHING
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
F\&W ECOL 875 - SPECIAL TOPICS
1-4 credits.
Enroll Info: None
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
F\&W ECOL/BOTANY/ZOOLOGY 879 - ADVANCED LANDSCAPE ECOLOGY 3 credits.

Landscape ecology emphasizes spatial patterning-its development and importance for ecological processes--and often focuses on large regions. Concepts, methods, and applications of landscape ecology will be learned through lectures, readings, exercises in quantitative approaches, and an independent project. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll

## Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
F\&W ECOL 961 - WILDLIFE SEMINAR
1 credit.
Monthly research reports and special topics. Enroll Info: None Requisites: 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 <br> 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. Enroll Info: None
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.
Enroll Info: None
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
F\&W ECOL 999 - ADVANCED INDEPENDENT STUDY
1-3 credits.
Enroll Info: None
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

## FRENCH (FRENCH AND ITALIAN) (FRENCH)

## FRENCH 101 - FIRST SEMESTER FRENCH

4 credits.
For students with no previous training in the language; oral practice and conversation, grammar, reading, vocabulary building, and study of French and Francophone cultures. Enroll Info: None
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 2020
FRENCH 102 - SECOND SEMESTER FRENCH
4 credits.
Continuation of FRENCH 101. Enroll Info: FRENCH 101 or appropriate score on placement exam. Open to Freshmen
Requisites: None
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: Fall 2020

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 that of the end of second semester French (102). Instruction draws on features shared by Romance languages, with focus on distinctions particular to French. No previous knowledge of French is required. Enroll Info: None
Requisites: ITALIAN 204, SPANISH 204, or PORTUG 202
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: FRENCH 102 or appropriate score on placement exam. Open to Freshmen

## Requisites: None

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
FRENCH 204 - FOURTH SEMESTER FRENCH
4 credits.
Continuation of FRENCH 203 with more advanced materials. Enroll Info:
FRENCH 203 or appropriate score on placement exam. Open to Fr
Requisites: None
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 2020

## FRENCH 210 - SEXUALITY AND GENDER IN 20TH-CENTURY FRENCH

 LITERATURE3 credits.
This course 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. FR210 is an introductory course in an interdisciplinary area of French studies. Taught in English. Enroll Info: None

## 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 (IN ENGLISH)
3-4 credits.
An introductory interdisciplinary area of French studies with a focus on literary texts. Enroll Info: None
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 2020
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. Enroll Info: None
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 227 - EXPLORING FRENCH: INTERMEDIATE-LEVEL COURSE FOR ENTERING STUDENTS
3 credits.
Development of oral and written skills, based on reading and discussion of contemporary socio-cultural topics. Enroll Info: Placement test recommendation. Open to Fr entering stdts only
Requisites: None
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: Fall 2020

## 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. A required prerequisite for the French major. Enroll Info: FRENCH 204 or 227 or consent of department. Open to Freshmen
Requisites: None
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: Fall 2020

## FRENCH 248 - ETHNIC STUDIES IN THE FRENCH/FRANCOPHONE WORLD(S) <br> 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. Taught in English. Enroll Info: None
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 - INTRODUCTION TO LITERARY ANALYSIS
3-4 credits.
An introduction to reading and analyzing literary works, with special emphasis on the development of writing skills in French. The program will concentrate on shorter works from the major genres of French literature, and prepare students for future study of literature. Enroll Info: FRENCH 228 or cons of department. Open to Fr
Requisites: None
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: Fall 2020
FRENCH 298 - DIRECTED STUDY
1-3 credits.
Enroll Info: Jr st. Graded on a Cr/N basis. Requires cons inst
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 2006
FRENCH 299 - DIRECTED STUDY
1-3 credits.
Enroll Info: Jr st. Graded on a lettered basis; requires cons inst

## 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

FRENCH 301 - PRACTICAL FRENCH CONVERSATION 1 credit.

Open during the fall semester to residents of the French House and nonresident students. Non-residents attend four or five lunches per week at the French House. For more information, consult the department. Enroll Info: FRENCH 203
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: Fall 2019
FRENCH 302 - PRACTICAL FRENCH CONVERSATION
1 credit.
Open during the spring semester to residents of the French House and non-resident students. Non-residents attend four or five lunches per week at the French House. For more information, consult the department.
Enroll Info: FRENCH 203
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 2020

FRENCH 311 - ADVANCED COMPOSITION AND CONVERSATION 3 credits.

Trains students to write essays on a variety of topics, using different registers of French, and work to correct pronunciation and improve conversation skills. Enroll Info: FRENCH 228
Requisites: None
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 2020
FRENCH 312 - ADVANCED ORAL AND WRITTEN EXPRESSION: WRITING ACROSS THE HUMANITIES
3 credits.
Develops students' writing and oral expression at an advanced level through writing and discussion of internet journalism, translation, or creative genres. Enroll Info: FRENCH 228
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: Summer 2020

## FRENCH/INTL BUS 313 - PROFESSIONAL COMMUNICATION AND CULTURE IN THE FRANCOPHONE WORLD <br> 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. Enroll Info: None
Requisites: FRENCH 228 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: Fall 2020
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. Enroll Info: None
Requisites: FRENCH 228, 311, or 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 2020
FRENCH/INTL BUS 315 - ADVANCED INTERDISCIPLINARY STUDIES IN PROFESSIONAL COMMUNICATION
3 credits.
In-depth study, from interdisciplinary perspectives, of key aspects of technical French language for the professions and business, together with an exploration of the history, sociology, and culture of professional environments in the French and Francophone worlds. Enroll Info: None
Requisites: FRENCH 228, INTL BUS/FRENCH 313, or 314
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 2012

FRENCH 316 - STUDY ABROAD: ADVANCED FRENCH LANGUAGE 2-6 credits.

A repeatable course used exclusively as an equivalent for advanced-level (post FRENCH 228) French language courses taken as part of a study abroad program. Enroll Info: None
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 - INTRODUCTION TO MEDIEVAL, RENAISSANCE, AND EARLY MODERN LITERATURE <br> 3 credits.

Introduction to important literary works from the medieval era to the
French Revolution. Classes conducted in French. Enroll Info: FRENCH 271
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: No
Last Taught: Fall 2020
FRENCH 322 - INTRODUCTION TO LITERATURE OF MODERNITY 3 credits.

Introduction to important literary works of modernity (from the French Revolution to the twenty-first century). Classes conducted in French.
Enroll Info: FRENCH 271
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: No
Last Taught: Fall 2020

## 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. Enroll Info: FRENCH 321-322
Requisites: None
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 - INTRODUCTION TO MEDIEVAL, RENAISSANCE, AND EARLY MODERN CIVILIZATION
3 credits.
An introduction to the political, social, intellectual, artistic and literary development of French culture, from its origins to the French Revolution (1789). Enroll Info: FRENCH 321 or 322

Requisites: None
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 2020

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. Enroll Info: FRENCH 271
Requisites: None
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 2020
FRENCH 350 - APPLIED FRENCH LANGUAGE STUDIES
1-3 credits.
A course for prospective French teachers or Second Language Acquisition students on a selected applied language topic. Enroll Info: None
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: Spring 2020
FRENCH 361 - STUDY ABROAD: FRENCH/FRANCOPHONE LITERATURE 2-3 credits.

A repeatable course used exclusively as an equivalent for French/ Francophone literature courses taken as part of a study abroad program. Enroll Info: None
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.

A repeatable course used exclusively as an equivalent for French/
Francophone civilization courses taken as part of a study abroad program. Enroll Info: None
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 391 - FRENCH FOR READING KNOWLEDGE

3 credits.
Intensive grammar and reading for graduate students and undergraduates with little or no experience in French. Readings from appropriate texts in the humanities, sciences, social sciences. May not be counted toward LS foreign language requirement. Does not count towards the French major. Enroll Info: Not open to Fr
Requisites: None
Course Designation: 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 2020
FRENCH 420 - TOPICS IN FRENCH: STUDY ABROAD
1-6 credits.

A course carried with a UW-Madison Study Abroad Program which has no equivalent on this campus. Enroll Info: 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 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. Enroll Info: None
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 2020

## FRENCH 430 - READINGS IN MEDIEVAL AND RENAISSANCE LITERATURE <br> 3 credits.

Exploration of a thematic selection of texts from the Middle Ages and the Renaissance. Enroll Info: FRENCH 321322
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: No
Last Taught: Fall 2014

FRENCH 431 - READINGS IN EARLY MODERN LITERATURE 3 credits.

Exploration of a thematic selection of texts from the Early Modern period.
Enroll Info: FRENCH 321322
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: No
Last Taught: Fall 2013
FRENCH 433 - READINGS IN TWENTIETH AND TWENTY-FIRST CENTURY LITERATURE
3 credits.
Exploration of a thematic selection of texts from the twentieth and twenty-first centuries. Enroll Info: FRENCH 321322
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: No
Last Taught: Fall 2012
FRENCH/AFRICAN 440 - AFRICAN/FRANCOPHONE FILM
3 credits.
Studies the construction of narratives in cinema and literature; teaches to analyze and write about cinema; explores links between cinema and national or regional politics and ideology; examines spectatorship in relation to questions of identity formation. Enroll Info: FRENCH 271
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: Spring 2019
FRENCH 449 - FRANCOPHONE MODERNITY STUDIES
3 credits.

Topics in modern Francophone culture and literature with special emphasis on colonialism, slavery, diasporas, postcolonialism, and immigration. Enroll Info: FRENCH 347 or 348
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 2016
FRENCH 451 - MEDIEVAL, RENAISSANCE, AND EARLY MODERN
STUDIES
3 credits.

A thematic historical survey of culture in pre-Revolutionary (pre-1789)
France. Enroll Info: FRENCH 321 or 322
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 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. Enroll Info: FRENCH 321322 or cons inst
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
Last Taught: Spring 2014
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. Enroll Info: FRENCH 321322 or cons inst
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
Last Taught: Spring 2019
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. Does not assume any background in science, medicine, or the history of the health professions. Enroll Info: None
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 2020
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. Enroll Info: FRENCH 321 or FRENCH 322.
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 2016

FRENCH 467 - ASPECTS OF CONTEMPORARY FRENCH LITERATURE 3 credits.

Enroll Info: None
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 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. Enroll Info: FRENCH 321
322
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
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. Enroll Info: One 400-level course in French lit
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
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.
Enroll Info: One 400-level course in French lit
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018

## FRENCH 569 - CRITICAL APPROACHES TO LITERATURE AND CULTURE: FRENCH AND FRANCOPHONE PERSPECTIVES <br> 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. Serves as a capstone for advanced undergraduate students, and a review of methodology and theory for incoming graduate students. Enroll Info: None
Requisites: Senior standing and declared in French undergraduate or masters 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 2020
FRENCH 590 - ADVANCED PHONETICS
3 credits.
Advanced study of French sounds, phonetic transcription, practice in pronunciation; required of teaching majors. Enroll Info: FRENCH 228
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 2018
FRENCH 595 - THEORY AND PRACTICE OF FRENCH/FRANCOPHONE DRAMA
4 credits.
Pertinent theory, interpretation of French and/or Francophone drama, practice of dramatic elocution, and performance. Enroll Info:

## FRENCH 321-322 or cons inst

## 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
FRENCH 615 - GRAMMAIRE AVANCEE
3 credits.
Advanced course in French grammar and style, with a special focus on various critical and professional applications. For students in the Professional French Masters Program. Enroll Info: None
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: Fall 2020

FRENCH 616 - SOCIAL RESPONSIBILITY IN CONTEMPORARY FRENCHLANGUAGE PROFESSIONAL WRITING
3 credits.
Required for Professional French Masters Program students, this interdisciplinary course 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, students will consider how trends in their individual PFMP concentration areas relate to those of their classmates and future colleagues. Enroll Info: None
Requisites: Declared in French Studies masters program or the capstone certificate in French Studies
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
FRENCH 617 - CONTEMPORARY SKILL SET LITERATURE IN FRENCH 3 credits.

This course 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. Enroll Info: None
Requisites: Declared in French Studies masters program or the capstone certificate in French Studies
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
FRENCH 618 - CAREER STRATEGIES FOR THE FRENCH-SPEAKING WORLD
2 credits.
Students will study published contemporary French-language writing on career strategies for emerging professionals and professionals in transition in Europe, Africa and North America. Enroll Info: None
Requisites: Declared in French Studies masters program or the capstone certificate in French Studies
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## FRENCH 623 - COMMUNICATION ORALE EN SITUATIONS PROFESSIONNELLES <br> 3 credits.

Professional communication for advanced speakers of French, with a particular focus on intercultural analysis, nonverbal communication, and public speaking. Required for students in the Professional French Masters Program. Enroll Info: None
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: Spring 2020
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. Enroll Info: None 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 - LE SIECLE DES LUMIERES
3 credits.
Enroll Info: None
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 - LITTERATURE FRANCAISE DU XVIIIE SIECLE 3 credits

Literary and philosophical trends of the Age of Enlightenment with special emphasis on Montesquieu, Voltaire, Diderot, and Rousseau. Enroll Info: None
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 - LE ROMAN AU XVIIIE SIECLE
3 credits.
Enroll Info: None
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 - LE ROMAN FRANCAIS 1850-1900
3 credits.
Etude des romans de Fromentin, Flaubert, Zola, Maupassant, et
Huysmans. Enroll Info: None
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 - LA LITTÉRATURE FRANÇAISE DU XIXE SIÈCLE 3 credits.

Study of nineteenth-century literary texts in relation to their historical or cultural contexts or in light of new theoretical approaches. Enroll Info:
None
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 - LA LITTERATURE DU XVIIE SIECLE
3 credits.
Etude approfondie des grandes oeuvres du XVIIe siecle. Enroll Info: None 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 640 - LA LITTERATURE DU XVIIE SIECLE
3 credits.
Continuation of 639 Enroll Info: None
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 2019
FRENCH 642 - CULTURE ET SOCIÉTÉS DANS LE MONDE FRANCOPHONE
3 credits.
Graduate survey of major socio-political, cultural, and economic developments in the major French-speaking regions of the world. Taught in three modules (Europe, Africa, and Canada), the course is required for students in the Professional French Masters Program. Enroll Info: None
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: Spring 2020
FRENCH 645 - LA LITTERATURE FRANCAISE DU XVIE SIECLE 3 credits.

Enroll Info: None
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 646 - LA LITTERATURE FRANCAISE DU XVIE SIECLE 3 credits.

Continuation of 645 Enroll Info: None
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 2015

FRENCH 647 - LE ROMAN FRANCAIS AU XXE SIECLE
3 credits.
Enroll Info: None
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 - CINÉMA FRANÇAIS/FRANCOPHONE
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. Enroll Info: None
Requisites: 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 657 - LA POESIE FRANCAISE DU XIXE SIECLE
3 credits.
Enroll Info: None
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 2011
FRENCH 665 - INTRODUCTION AUX ETUDES FRANCOPHONES 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. Enroll Info: Grad st
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
FRENCH 681 - SENIOR HONORS THESIS
3 credits.

Enroll Info: None
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.

## Enroll Info: None

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.

Enroll Info: None
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
FRENCH 692 - THESIS
2 credits.
Enroll Info: None
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.
$\mathrm{Cr} / \mathrm{N}$. Enroll Info: Jr or Sr st. Graded on a Cr/N basis; requires cons inst 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.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020

FRENCH/MEDIEVAL 701 - INTRODUCTION A L ANCIEN FRANCAIS 3 credits.

## Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

FRENCH/MEDIEVAL 703 - LA LITTERATURE FRANCAISE DU XIV ET DU XV SIECLE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
FRENCH/MEDIEVAL 704 - LA LITTERATURE FRANCAISE DU XIV ET DU XV SIECLE
3 credits.
Enroll Info: None
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.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
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. Limited to students in the Professional French Masters Program and Capstone Certificate of Professional French Studies. Enroll Info: Limited to Grad St in Professional French Masters Program and Capstone Certificate of Professional French 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 2020
FRENCH 799 - INDEPENDENT STUDY
1-6 credits.
Enroll Info: None
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

FRENCH/GERMAN/HISTORY/POLI SCI/SOC 804 - INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
FRENCH/ITALIAN/PORTUG/SPANISH 817 - ROMANCE PHILOLOGY 3 credits.

Seminar focusing on linguistic and philological analyses of the textual record in (Hispano-)Romance. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
FRENCH 820 - COLLEGE TEACHING OF FRENCH
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
FRENCH/ITALIAN 821 - ISSUES IN METHODS OF TEACHING FRENCH

## AND ITALIAN

1-3 credits.
Enroll Info: French/Italian 820; or foreign lang teaching experience 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
FRENCH 825 - COURS DE GRAMMAIRE ET DE STYLE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
FRENCH 826 - COURS DE GRAMMAIRE ET DE STYLE
3 credits.
Continuation of 825. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

FRENCH 901 - SEMINAR-MATERIALS AND METHODS OF RESEARCH 1-3 credits.

Required for Ph.D. candidates. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
FRENCH 931 - SEMINAR-18TH CENTURY
3 credits.
Enroll Info: None
Requisites: 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 932 - SEMINAR-18TH CENTURY
3 credits.
Continuation of 931 Enroll Info: None
Requisites: 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
FRENCH/MEDIEVAL 939 - LA LITTERATURE MEDIEVALE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
FRENCH 947 - SEMINAR: QUESTIONS DE LITTERATURE
3 credits.
Enroll Info: None
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

FRENCH 948 - SEMINAR: QUESTIONS DE LITTERATURE
3 credits.
Enroll Info: None
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

FRENCH 949 - SEMINAR-ECRIVAINS FRANCAIS DU XVIE SIECLE 3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
FRENCH 951 - SEMINAR ON 19TH CENTURY FRENCH POETRY
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
FRENCH 955 - SEMINAR-LE THEATRE DU XX SIECLE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
FRENCH 963 - SEMINAR-STUDIES IN THE ROMANTIC PERIOD
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
FRENCH 990 - INDIVIDUAL RESEARCH
1-12 credits.
In connection with the doctoral dissertation. Staff, on consultation with the chairperson. Enroll Info: None
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

## 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. Enroll Info:

## None

Requisites: Reserved Class Section for residents in the Open House:
Gender Learning Community in Phillips Hall, 2nd floor.
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

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 nonbinary 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. Enroll Info: None
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: Fall 2020

## GEN\&WS 110 - FIRST YEAR TOPICS SEMINAR IN GENDER, WOMEN AND

 THE HUMANITIES3 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. Enroll Info: None
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
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. Enroll Info: None
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 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. Enroll Info: None
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 2020

## 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. Enroll Info: None

## 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 2020
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. Enroll Info: None

## 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: Fall 2020
GEN\&WS/LITTRANS 205 - WOMEN IN RUSSIAN LITERATURE IN TRANSLATION
3-4 credits.
Enroll Info: None
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 2019
GEN\&WS/C\&E SOC/SOC 215 - GENDER AND WORK IN RURAL AMERICA 3 credits.

Sociological dimensions of men's and women's work in nonmetropolitan areas of the United States. Examines gender divisions of "work" in its fullest sense: paid work in formal and informal economies, selfemployment, and nonmarket work such as housework. Enroll Info: None
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 2014

## GEN\&WS/AFROAMER 221 - INTRODUCTION TO BLACK WOMEN'S STUDIES <br> 3 credits.

This course will provide students with an overvview of the field of Black women's studies. Enroll Info: None
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 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Satisfied Communications A requirement
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
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. Enroll Info: None
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 2020
GEN\&WS/ENGL 248 - WOMEN IN ETHNIC AMERICAN LITERATURE 3 credits.

American literature by and about women, written by authors from ethnic groups. Enroll Info: None
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 2020
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. Enroll Info: None
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
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. Enroll Info: None
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 2014

GEN\&WS/LITTRANS 270 - GERMAN WOMEN WRITERS IN TRANSLATION
3 credits.
Enroll Info: None
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: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Declared in 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: Fall 2015

GEN\&WS 299 - DIRECTED STUDY
1-3 credits.
For highly qualified and motivated students. Enroll Info: None 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 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. Enroll Info: None
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 2020

## 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. Enroll Info: None 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 310 - SPECIAL TOPICS IN GENDER, WOMEN AND THE

 hUMANITIES1-3 credits.
Investigation of some specific topic in gender and women's studies related to gender, women and the humanities. Enroll Info: None
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 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. Enroll Info: None
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. Enroll Info: None
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 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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020
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. Enroll Info:
None
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. Enroll Info: So st
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. Enroll Info: So st
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 2020
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. Enroll Info: None
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

## 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. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2014

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. Enroll Info:
None
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: Yes, unlimited number of completions Last Taught: Spring 2013

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, CubanAmerican, and Puerto Rican women. Interdisciplinary readings in law, journalism, public policy, history, and self-reflective literature. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## GEN\&WS 340 - TOPICS IN LGBTQ SEXUALITY

3 credits.
Topics in feminist study of LGBTQ sexualities, considering race, nationality, and time. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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/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. Enroll Info: None
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
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. Enroll Info: None
Requisites: GEN\&WS 101, 102, 103, or 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: Fall 2020
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. Enroll Info: None
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

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. Enroll Info: None
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 2018
GEN\&WS/HISTORY 354 - WOMEN AND GENDER IN THE U.S. SINCE

## 1870

3-4 credits.
See 520. Enroll Info: None
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 2019
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. Enroll Info: None
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
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. Enroll Info: None
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 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. Enroll Info: None
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 2020
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. Enroll Info: None
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

## 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. Enroll Info: None
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 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. Enroll Info: None
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. Enroll Info: None
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/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. Enroll Info: None
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/ENGL 401 - RACE, SEX, AND TEXTS (HOW TO DO THINGS WITH WRITING) <br> 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. Enroll Info: None
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 2019

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. Enroll Info: None
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 2020
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. Enroll Info: None
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
GEN\&WS 414 - GENDER, PERFORMANCE, AND SEXUALITY
3 credits.
Explores the ways in which we perform sexuality and gender. Covers issues related to performance theory, social constructionism, gender socialization, and philosophy, while exploring how gender and sexuality are constructed, enacted, and communicated in various contexts. Enroll Info: None
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 2013

## GEN\&WS/THEATRE 415 - INTRODUCTION TO CONTEMPORARY FEMINIST THEATRE AND CRITICISM <br> 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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Must have grad standing or have taken one of the following courses: Gender \& Women's Studies 101, 102, or 103, or Gender \& Women's Sociology 200, or Communication Arts 250.
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 2019
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. Enroll Info: None
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

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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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 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. Enroll Info: None
Requisites: SOC/LEGAL ST 131, GENS\&WS 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: Fall 2020
GEN\&WS 426 - WOMEN AND GRASSROOTS POLITICS ACROSS THE GLOBE
3 credits.
Examination of the range of women's and feminist grassroots activism across the globe. Focuses on the complexities of individual and community service, learning and scholarship, and women's roles in facilitating social change. Enroll Info: None
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 2012

## 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. Enroll Info: None
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 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 Enroll Info: None

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

## 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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

## GEN\&WS 441 - CONTEMPORARY FEMINIST THEORIES

3 credits
Contemporary theoretical positions and debates about feminisms in the humanities and social sciences. Enroll Info: None
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 2019
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. Enroll Info: None
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
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. Enroll Info: None
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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2020

GEN\&WS/PORTUG 450 - BRAZILLIAN WOMEN WRITERS
3 credits.
A survey of representative writing by contemporary Brazillian women writers in relation to representations of nationality, race, class, ethnicity, gender and sexualities. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2019

## GEN\&WS/SOC 477 - FEMINISM AND SOCIOLOGICAL THEORY

3 credits.
Reviews the ways that feminist critiques have reshaped social theory since 1960. Examines the ways that feminist theorists have reconceptualized classical sociological problems and how this has influenced the ways research in conducted. Enroll Info: None
Requisites: SOC/C\&E SOC 475, GEN\&WS 102, or GEN\&WS 200
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 2014
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
Enroll Info: None
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; genderbased violence; female achievement and power; lifestyle choices of women; women and mental health; and psychological research with transgender individuals. Enroll Info: None
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: Fall 2019
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. Enroll Info: None
Requisites: Junior standing or GEN\&WS 103
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 2020

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2018
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. Enroll Info: None 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: Yes, unlimited number of completions Last Taught: Spring 2020

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). Enroll Info: None
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: Fall 2018

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 21 st 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. Enroll Info: None
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

## 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. Enroll Info: None
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
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. Enroll Info: None
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 2020

GEN\&WS/ENGL 545 - FEMINIST THEORY AND WOMEN'S WRITING IN ENGLISH
3 credits.
Feminist theory and women's writing in English. Enroll Info: None
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 feministinformed 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. Enroll Info: None
Requisites: GEN\&WS 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 2020

## 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. Enroll Info: None
Requisites: AFROM AM 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: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Junior standing and SOC/C\&E SOC 475, GEN\&WS 441, GEN\&WS 445, or GEN\&WS 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 \& 2OTH CENTURIES) <br> 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. Enroll Info: None
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 2013
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. Enroll Info: None
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 2018
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. Enroll Info: None
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

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. Enroll Info: None
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
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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## GEN\&WS 661 - GLOBAL INTERNSHIP IN GENDER AND WOMEN'S STUDIES <br> 1-6 credits.

Internship opportunity for learning and working abroad. Connects coursework in gender and women's studies to specific community organizations, educational projects, civic institutions and related missions and issues in selected countries. Enroll Info: None
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

## GEN\&WS/AFROAMER 677 - CRITICAL AND THEORETICAL PERSPECTIVES IN BLACK WOMEN'S WRITINGS <br> 3 credits.

Analyses and interpretations of literary works by black women writers through historical, philosophical, political, feminist, and other contemporary critical methods. Enroll Info: None
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 2017
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. Enroll Info: None
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
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. Enroll Info: None
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
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. Enroll Info: None
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

## GEN\&WS 691 - SENIOR THESIS I

2-3 credits.
Research and preparation for the writing of a senior thesis. Enroll Info:
None
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
GEN\&WS 692 - SENIOR THESIS II
2-3 credits.
Senior thesis. Enroll Info: None
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
GEN\&WS 699 - DIRECTED STUDY
1-6 credits.
Graded on lettered basis. Enroll Info: None
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 2020
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. Enroll Info: None
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

GEN\&WS/ENGL 737 - FEMINIST THEORY AND CRITICISM
3 credits.
Feminist theory, with an emphasis on literary and cultural theory and criticism in English. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None
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
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. Enroll Info: None
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

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. Enroll Info: None
Requisites: 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

## GEN\&WS/ED POL/PUB AFFR 805 - GENDER ISSUES IN INTERNATIONAL EDUCATIONAL POLICY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2018

## GEN\&WS 830 - CONTEMPORARY THEORIZING IN GENDER AND

 WOMEN'S STUDIES3 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEN\&WS/C\&E SOC/SOC 904 - SOCIOLOGICAL PERSPECTIVES ON GENDER
3 credits.
Advanced topics in the analysis of gender relations in society. Enroll Info: None
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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
GEN\&WS 950 - SEMINAR: TOPICS IN GENDER AND WOMEN'S STUDIES 3 credits.

Research seminar on specific topics in gender and women's studies. Enroll Info: None
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 Enroll Info: None
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

## GEN\&WS 999 - INDEPENDENT RESEARCH

1-3 credits.
Directed study projects for graduate students as arranged with a faculty member Enroll Info: None
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

## GENERAL BUSINESS (GEN BUS)

GEN BUS 110 - PERSONAL AND PROFESSIONAL FOUNDATIONS IN BUSINESS
1 credit.
An introductory course for new business students covering the transition to college, academic exploration and planning, career development, selfassessment for personal development, leadership, and diversity and inclusion. Enroll Info: None
Requisites: First year student and member of Business Freshman Direct Admit
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2008

GEN BUS 300 - PROFESSIONAL COMMUNICATION 3-4 credits.

Expository writing relative to written communications used in organizations: letters, factual memoranda, brief reports, technical research reports. Development of skills in oral and graphic communications; committee reports, staff presentations. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Spring 2020
GEN BUS 301 - BUSINESS LAW
3 credits.
History of legal development, contracts, agency, sale of goods, insurance. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Fall 2020
GEN BUS 302 - BUSINESS ORGANIZATIONS AND NEGOTIABLE INSTRUMENTS
3 credits.
Commercial paper, real estate and personal property, partnerships, corporations, bankruptcy. Enroll Info: None
Requisites: Junior standing and GEN BUS 301
Repeatable for Credit: No
Last Taught: Fall 2020
GEN BUS 303 - BUSINESS STATISTICS
3 credits.
Data collection, data structures in a business setting, frequency tables and plots, descriptive statistics, correlation tables and regression formulation, normal and binomial distributions, quality, surveys. Enroll Info: None
Requisites: Sophomore standing and (MATH 211, 217, 221 or 275); or member of 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: Summer 2015
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. Enroll Info: None
Requisites: Sophomore standing and (MATH 211, 217, 221 or 275); or member of Business Exchange program

## 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 306 or member of Business Exchange program Repeatable for Credit: No
Last Taught: Fall 2020

## GEN BUS 310 - FUNDAMENTALS OF ACCOUNTING AND FINANCE FOR NON-BUSINESS MAJORS <br> 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. Enroll Info: None
Requisites: Sophomore standing or member of 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: Fall 2020

## GEN BUS 311 - FUNDAMENTALS OF MANAGEMENT AND MARKETING FOR NON-BUSINESS MAJORS <br> 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. Enroll Info: None
Requisites: Sophomore standing. Not open to students declared in a School of Business 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 2020
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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
Repeatable for Credit: No
Last Taught: Fall 2020

GEN BUS 360 - WORKPLACE WRITING AND COMMUNICATION 3 credits.

Develop and practice three aspects of successful communication: writing, presenting, 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 presentation. Through a collaborative workshop process, revise your own written work. Enroll Info: None
Requisites: Sophomore standing; Satisfied Communications A requirement; no concurrent enrollment with GEN BUS 110, 120, or 130
Course Designation: Gen Ed-Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020

## GEN BUS 365 - CONTEMPORARY TOPICS

1-3 credits.

A course for the exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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 2012
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. Enroll Info: 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: Fall 2020

## GEN BUS 451 - PROFESSIONAL EXPERIENCE IN BUSINESS-EXTENDED INTERNSHIP <br> 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 fulltime student. Enroll Info: Intended for undergraduates in the School of Business
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020

## GEN BUS/ENVIR ST 601 - SYSTEMS THINKING AND SUSTAINABLE BUSINESSES <br> 3 credits.

Introduces students to the concept of systems thinking so as to allow them to use systems to bring about large scale social change, both within the business community and within our societal infrastructure. Enroll Info: None
Requisites: Junior standing and declared in an undergraduate School of Business major or Environmental Studies
Repeatable for Credit: No
Last Taught: Spring 2014
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 handson 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.). Enroll Info: None
Requisites: GEN BUS 307, 704, 705, MATH/STAT 310, or STAT 312
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of 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. Enroll Info: None
Requisites: Graduate/professional standing or member of 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. Enroll Info: None
Requisites: Declared in an MBA program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GEN BUS 705 - STATISTICS AND PROGRAMMING FOR BUSINESS ANALYTICS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in an MBA program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## GEN BUS 711 - FINANCIAL MANAGEMENT OF HEALTHCARE ORGANIZATIONS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
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 handson 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 decisionmaking, and data presentation. Enroll Info: 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 2020

## 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. Enroll Info: None
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

## GEN BUS 730 - PRESCRIPTIVE MODELING AND OPTIMIZATION FOR BUSINESS ANALYTICS

2-3 credits.
Introduce students to fundamentals of prescriptive modeling, with principles of a sound decision-making process that can be applied to any situation, including spreadsheet modeling techniques for deterministic and stochastic decision-support, some fundamentals of optimization theory, including solutions to several classic problems in operations research, and gain exposure to optimization tools in R. Class is a blend of tools, techniques, and hands-on learning and will focus on preparing you to be a user of prescriptive models and techniques, some mathematical foundations underlying them to some extent. Enroll Info: Recommend general computing skills and familiarity with Excel, introductory-level exposure to coding in any language, some $R$ experience, basic knowledge of probability and statistics and calculus. Some knowledge of linear algebra is helpful but not necessary.
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 randomizedcontrolled experiments; and (3) identification of "natural experiments" in business data and corresponding empirical strategies. Enroll Info: None
Requisites: (GEN BUS 704 or 705) and (GEN BUS 720 or concurrent enrollment)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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: Fall 2020

## GEN BUS 765 - CONTEMPORARY TOPICS

1-4 credits.
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
GEN BUS 770 - ANALYTICS CONSULTING PRACTICUM
1-4 credits.
Brings together all of the material students have learned throughout the business analytics program and synthesize through an applied consulting project. Provides the opportunity to explore/apply concepts to your future career through: Identifying and understanding the business challenge, applying analytical methods to discover insight(s) to help answer the business challenge, developing recommendations based on the discovered findings, and communicating findings and recommendation(s). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: STAT 609 or STAT/MATH 709
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 nonfinancial 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
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 2014
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. Enroll Info: None
Requisites: STAT 849 and ECON 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

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 2019
GEN BUS 975 - PH.D. COMMUNICATION FOR DISSERTATORS 1 credit.

Review of research writing and presentation strategies and practice drafting, editing, and presenting proposal and/or dissertation sections for feedback and revision. Seminar/workshop designed for post-prelim dissertators: focuses on advanced structural and clarity issues, not basic writing/grammar. Enroll Info: Recommended for PhD students who have attained dissertator status.
Requisites: Declared in Business PHD
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

## GENETICS 155 - FRESHMAN SEMINAR IN GENETICS <br> 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## GENETICS 375 - SPECIAL TOPICS

1-4 credits.
Specialized subject matter of current interest to undergraduate students.
Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Summer 2019
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. Enroll Info: None
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 2020

## 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. Enroll Info: None 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 381 or BOTANY/BIOLOGY 130 or 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: (ZOOLOGY/BIOLOGY 101 and 102, or ZOOLOGY/BIOLOGY/ BOTANY 151, BIOCORE 381, or 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 2020

## 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. Enroll Info: None
Requisites: GENETICS 467
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: GENETICS 466, 467, BIOCORE 587, ZOOLOGY/PSYCH 523, or PSYCH 454
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 2020
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. Enroll Info: None 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
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: GENETICS 466 or 467
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## GENETICS 527 - DEVELOPMENTAL GENETICS FOR CONSERVATION AND REGENERATION <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: GENETICS 466, 467, BIOCORE 381, or ZOOLOGY 470
Course Designation: Sustain - Sustainability
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: GENETICS 466, 468, or BIOCORE 587
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 2020
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. Enroll Info: None
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\&S Credit - Counts 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
GENETICS/MD GENET/ZOOLOGY 562 - HUMAN CYTOGENETICS
2 credits.
Fundamental principles of cytogenetics and special problems of human cytogenetics. Enroll Info: None
Requisites: GENETICS 466, 468, BIOCORE 587, or declared in Master of Genetic Counselor Studies 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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020

## GENETICS 575 - MISCELLANEOUS SYSTEMS

3 credits.
Anatomy, histology, physiology and pathology of skin, thyroid, lymph nodes and other sites and the corresponding celluular 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 speciments. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: GENETICS 466, 467 or BIOCORE 383
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
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 2020

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). Enroll Info: 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 2019

## GENETICS/BIOCHEM/MD GENET 620 - EUKARYOTIC MOLECULAR BIOLOGY <br> 3 credits.

Focuses on the basic molecular mechanisms that regulate DNA, RNA, and protein metabolism in eukaryotic organisms. Enroll Info: None 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 2020

## 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## GENETICS/CHEM 626 - GENOMIC SCIENCE

2 credits
This course is designed to bring cutting-edge topics in the genomic sciences into the reach of traditionally "pure" chemistry, biology, engineering, computer science statistics students. It is also designed for enabling biologically-oriented students to deal with the advances in analytical science so that they may incorporate new genomic science concepts into their own scientific repertoires. Intended for graduate students and for undergraduates with extensive research experience. Enroll Info: None
Requisites: Graduate Students Only
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 2019

## 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. Enroll Info: None
Requisites: GENETICS 466, 468, or BIOCORE 587
Repeatable for Credit: No
Last Taught: Spring 2020

## GENETICS 631 - PLANT GENETICS

2 credits
Covers the basic concepts of genetics and genomics as applied to plants, 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), and a description of current methodologies used in the analysis of these processes. Our objective is to instigate in students a broader knowledge and understanding of the principles and methodologies used in plant genetics such that they can adopt them most effectively in their own research projects, and can describe and discuss them more thoroughly with the general public. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (Junior standing and 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 2020

## GENETICS/BOTANY/M M \& I/PL PATH 655 - BIOLOGY AND GENETICS OF FUNGI <br> 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. Enroll Info: Graduate or professional standing
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 2020

## 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. Enroll Info: None
Requisites: GENETICS 466, 467 or BIOCORE 383
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No Last Taught: Summer 2020

## GENETICS 672 - SEMINAR IN LABORATORY OPERATIONS AND QUALITY CONTROL <br> 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. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 cliniccal cytology. Enroll Info: None
Requisites: Declared in Cytotechnology
Repeatable for Credit: No
Last Taught: Spring 2020

GENETICS/MD GENET 677 - ADVANCED TOPICS IN GENETICS 1-3 credits.

Contents vary; consideration of subjects not included in the curriculum. Enroll Info: None
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: Fall 2020

## GENETICS 681 - SENIOR HONORS THESIS

2-4 credits.
Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
GENETICS 682 - SENIOR HONORS THESIS
2-4 credits.
Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2020
GENETICS 699 - SPECIAL PROBLEMS
1-3 credits.
Individual advanced work in an area of Genetics under the direct
guidance of a faculty member. Enroll Info: None
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 2020

## 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, genonmics, developmental genetics, and epigenetics. Enroll Info: None
Requisites: Declared in Genetics doctoral program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 revese genetics, molecular genetics, genonmics, developmental genetics, and epigenetics. Enroll Info: None
Requisites: GENETICS 701
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
GENETICS/BIOCHEM 703 - TOPICS IN EUKARYOTIC REGULATION
2 credits.
Design and interpretation of experiments addressing molecular mechanisms of eukaryotic regulation. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: None
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 2020

## GENETICS/MD GENET 708 - METHODS AND LOGIC IN GENETIC

 ANALYSIS3 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. Enroll Info: None
Requisites: Declared in Genetics graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GENETICS/BOTANY/ENTOM/ZOOLOGY 820 - FOUNDATIONS OF EVOLUTION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GENETICS/BIOCHEM/BOTANY 840 - REGULATORY MECHANISMS IN PLANT DEVELOPMENT <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GENETICS 875 - SPECIAL TOPICS
1-4 credits.

Special topics of current interest to graduate students. Enroll Info: None 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GENETICS/B M E/B M I/BIOCHEM/CBE/COMP SCI 915 - COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE <br> 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. Enroll Info: None
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
GENETICS/AN SCI/DY SCI 951 - SEMINAR IN ANIMAL BREEDING
0-1 credits.
Enroll Info: None
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. Enroll Info: None 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
GENETICS 990 - RESEARCH
1-12 credits.
Independent laboratory research in preparation of a graduate thesis under supervision of a faculty member. Enroll Info: None
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
GENETICS 993 - SEMINAR IN GENETICS
$0-1$ credits.
Various aspects of genetics: Drosophila, maize, immunogenetics, developmental genetics, or other special topics. Enroll Info: None
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

## GEOGRAPHY (GEOG)

## GEOG 101 - INTRODUCTION TO HUMAN GEOGRAPHY

4 credits.
Human geographers explore socio-spacial relations, processes and representations of the world in which we live. This course engages economic, political, urban, socio-cultural and environmental geographic perspectives to investigate patterns and processes that have come to be associated with 'globalization'. Enroll Info: None
Requisites: None
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: Fall 2020
GEOG 104 - INTRODUCTION TO HUMAN GEOGRAPHY 3 credits.

Human geographers explore socio-spacial relations, processes and representations of the world in which we live. This course engages economic, political, urban, socio-cultural and environmental geographic perspectives to investigate patterns and processes that have come to be associated with 'globalization'. This course does not carry Com-B credit. Enroll Info: Open to Fr. Stdts cannot receive cr for both GEOG 101104
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
GEOG/ENVIR ST 120 - INTRODUCTION TO THE EARTH SYSTEM 3 credits.

Introduces students to how the Earth system works and what makes Earth livable. Through this course you will gain a deeper appreciation for how the atmosphere, oceans, life, and earth's surface interact to shape our local, regional and global landscapes. Many students take this course to fulfill their physical science requirement. Others use it as a gateway to majors and careers in Geography, Environmental Studies, and Environmental Science. Enroll Info: Not open to students with credit for ENVIR ST/GEOG 127
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: Open to Freshmen not open to those with GEOG/ENVIR ST 120, 123, 124, or 125 credit or ILS 132 credit 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG 170 - OUR DIGITAL GLOBE: AN OVERVIEW OF GISCIENCE AND ITS TECHNOLOGY
3 credits.
Non-specialist course providing an overview of the collection, representation and use of geospatial data. Introduces students to geospatial technologies like GPS, Google Earth, satellite imagine, and GIS, and provides a critical understanding of the strengths and limitations of spatial representations (e.g., maps, images). Enroll Info: None
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 2020
GEOG 198 - DIRECTED STUDY
1-2 credits.
Enroll Info: Open to Fr So. Graded on a Cr/N basis; requires cons inst
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.
Enroll Info: Open to Fr So. Graded on a lettered basis; requires cons inst
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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 21 st century, including an exposure to region's contemporary literature. Enroll Info: 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 2020

## GEOG/HISTORY/POLI SCI/SLAVIC 253 - RUSSIA: AN

 INTERDISCIPLINARY SURVEY4 credits.
Comprehensive interdisciplinary survey of Russian civilization from its beginnings through the present day. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2020

## GEOG/AFROAMER/ANTHRO/C\&E SOC/HISTORY/LACIS/POLI SCI/SOC/

 SPANISH 260 - LATIN AMERICA: AN INTRODUCTION3-4 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. Enroll Info: None
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: Summer 2020

## GEOG/AFRICAN/AFROAMER/ANTHRO/HISTORY/POLI SCI/SOC 277 AFRICA: AN INTRODUCTORY SURVEY <br> 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. Enroll Info: None

## 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: Fall 2020
GEOG 301 - REVOLUTIONS AND SOCIAL CHANGE
3 credits.
An introduction to the spatial dimensions of social movements, social struggles, and radical social change. Provides students with a range of critical and theoretical perspectives for reading and interpreting space as a tool of social transformation. Lectures and discussions explore a variety of historical examples from the nineteenth century to the present. Enroll Info: None
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. Enroll Info: So st

## Requisites: None

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

## 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. As an ethnic studies class, 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. Enroll Info: None
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 2020
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. The course will examine 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. Enroll Info: None
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

## 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. Enroll Info: None 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

## GEOG/ENVIR ST 309 - PEOPLE, LAND AND FOOD: COMPARATIVE STUDY OF AGRICULTURE SYSTEMS <br> 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. Enroll Info: Sophomore standing
Requisites: None
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## GEOG/INTL ST 311 - THE GLOBAL GAME: SOCCER, POLITICS, AND

 IDENTITY3 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. The course will draw 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: Sophomore standing
Requisites: None
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/GEOSCI 320 - GEOMORPHOLOGY
3 credits.
Principles and analysis of geomorphic processes and resulting land forms. Field trip. Enroll Info: One of the following: GEOSCI 100, 101, 106, 109, 204, GEOG/ENVIR ST 120, 127
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## GEOG/ATM OCN/ENVIR ST 322 - POLAR REGIONS AND THEIR IMPORTANCE IN THE GLOBAL ENVIRONMENT <br> 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. Enroll Info: None
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/ATM OCN 323 - SCIENCE OF CLIMATE CHANGE

3 credits.
This is a calculus-based treatment of climate system physics and the mechanisms of modern-day anthropogenic climate change. By the end of this course, students will understand: a. How solar radiation and rotating fluid dynamics determine the basic climate state; $b$. Mechanisms of natural variability and change in climate; c. Why anthropogenic climate change is occurring; and d. Which scientific uncertainties are most important to estimates of 21 st century change. Enroll Info: None Requisites: PHYS 103, 201 or 207; and MATH 217, 221 or 275 . Not open to students who have enrolled in 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
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. When taught by Knox, major emphasis on surface water hydrology, erosion, sedimentation, and physical characteristics of streams and rivers. Enroll Info: Intro phy geog or phy geosci crse, or cons inst
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
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. Enroll Info: GEOG/ENVIR ST 120 or 127 or Geol 100 or 101 or cons inst
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
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.
Climate change is underway and will continue into the foreseeable future. This course offers a fundamental understanding of how and why global warming is happening, and what to expect in the future. Together, we will 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. Enroll Info: Geog/IES 120 or 127 or ATM OCN 100 or equivalent recommended. Freshmen permitted only 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
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 2020

GEOG/ENVIR ST 337 - NATURE, POWER AND SOCIETY
3 credits.
Explores the links between nature, power and society in today's world. The course considers the complex relationships between humans and the earth's resources, including food, energy, physical materials, water, biota, and landscapes; it considers issues linked to population and scarcity, resource tenure, green consumerism, political economy, environmental ethics, risks and hazards, political ecology, and environmental justice. Enroll Info: Sophomore standing. Not open to students who took Geog/ Env 139 in 2010-11, 2011-12 or 2012-13.
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG/BOTANY 338 - ENVIRONMENTAL BIOGEOGRAPHY
3 credits.
This course will explore 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. Enroll Info: GEOG/ENVIR ST 120, 127 or consent of instructor
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: So st
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Online course. Enroll Info: None
Requisites: Sophomore standing; not open to students who have taken GEOG 140
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 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. Enroll Info: Sophomore standing
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: Summer 2020
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## GEOG/AMER IND/ENVIR ST 345 - MANAGING NATURE IN NATIVE <br> NORTH AMERICA <br> 3 credits.

Surveys the concepts, practices, and issues associated with natural resource management in American Indian communities. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

GEOG 348 - LATIN AMERICA
4 credits.
A topical and historical survey of the cultural ecology and human geography of Middle America and South America. Enroll Info: So st 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 2017
GEOG 349 - EUROPE
3 credits.
A topical overview of people-environment interaction, migration, culture, urbanization, political organization and integration. Enroll Info: So st
Requisites: None
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 353 - RUSSIA AND THE NIS-TOPICAL ANALYSIS
3 credits.
Enroll Info: So st
Requisites: None
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 2013
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. Enroll Info: So st 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: Fall 2016

GEOG 358 - HUMAN GEOGRAPHY OF SOUTHEAST ASIA
3 credits.
This survey course is designed to introduce intermediate undergraduate students to the Human Geography of Southeast Asia, including the basic geography and history of the region, 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 amongst Southeast Asians in the
USA. Enroll Info: Sophomore standing
Requisites: None
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. 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. This course provides a survey of Australian geology, ecology, society or culture. It will include weekly check-ins with current events in Australia and exercises that connect students to current resource management problems using Google Earth and other tools. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Social Science

## Level - Intermediate

L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2018
GEOG 360 - QUANTITATIVE METHODS IN GEOGRAPHICAL ANALYSIS 4 credits.

Application of descriptive and inferential statistics to geographical problems. Enroll Info: So st; completion of QRA
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. It will introduce 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. Designed specifically for majors, they should emerge from the course with an appreciation of the spectrum of possible geographic research subjects and themes which can be carried through other courses in the major. Enroll Info: None
Requisites: Declared in Geography or Cartography and Geographic Information Systems
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 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. Enroll Info: Sophomore standing or 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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: MATH 114 Sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: Envir St 301 or consent of instructor, sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015

## GEOG/CIV ENGR/ENVIR ST 377 - AN INTRODUCTION TO GEOGRAPHIC

 INFORMATION SYSTEMS4 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. Meets with Civil Environmental Engineering 357. Enroll Info: None
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: Fall 2020
GEOG 378 - INTRODUCTION TO GEOCOMPUTING
4 credits.
Introduction to scripting for Geographic Information Science.
Geoprocessing with open-source GIS utilities. Phython scripting with ArcGIS and open-source libraries. Enroll Info: GEOG/CIV ENGR/
ENVIR ST 377 or equivalent (may be taken concurrently)
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 2020
GEOG 399 - INDEPENDENT STUDY
1-3 credits.

Designed to provide between 1 and 3 credits for independent study in Geography under direct guidance of a faculty member. It is designated for study at the intermediate level, meaning that it will be appropriate for students' initial exploration of an area of scholarship in Geography through laboratory, field, or literary study. Enroll Info: None
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/GEOSCI 420 - GLACIAL AND PLEISTOCENE GEOLOGY 3 credits.

Principles, characteristics and work of glaciers; events of the Pleistocene. Field trip. Enroll Info: GEOSCI 100, 101, 106 or 109 or GEOG/ ENVIR ST 120

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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
GEOG/C\&E SOC/ENVIR ST 434 - PEOPLE, WILDLIFE AND LANDSCAPES 3 credits.

This course explores the relationship between humans and wildlife amidst diverse landscapes, both historic and contemporary, tropical and temperate. We study how humans shape wild animal populations by modifying physical environments, and by hunting, domesticating and introducing species. Enroll Info: Geog/ENVIR ST/GEOG 339
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## GEOG/ENVIR ST 439 - US ENVIRONMENTAL POLICY AND REGULATION

 3-4 credits.This course covers a broad cross-section of American environmental policy by focusing on specific statutes and policy arenas. In this course we will survey 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. 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. This course will maintain 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. Enroll Info: None
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## GEOG/ENVIR ST/HISTORY 460 - AMERICAN ENVIRONMENTAL HISTORY <br> 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. Enroll Info: So st
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
Grad 50\% - Counts toward 50\% graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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 teaching students skills they can use to interpret landscape history themselves. Enroll Info: None
Requisites: Sophomore standing or one course 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2018
GEOG 475 - TOPICS IN GEOGRAPHY
1-4 credits.

Subject matter, credits and prerequisites vary. Enroll Info: Varies 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 2020

GEOG 500 - QUALITATIVE STRATEGIES IN GEOGRAPHY 3 credits.

This seminar course 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. Enroll Info: None
Requisites: Students must have junior, senior or graduate standing to enroll for this class.
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 2019

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. Enroll Info: Jr st
Requisites: None
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
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. Enroll Info: Jr st
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 2020
GEOG/URB R PL 505 - URBAN SPATIAL PATTERNS AND THEORIES 3 credits.

Various urban empirical regularities and theories which explain them.
Enroll Info: GEOG/URB R PL 305 or consent of instructor
Requisites: None
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 2019
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-Word War II era, with emphasis on changes in built environment, public space and infrastructure, land use, and urban systems. Enroll Info: Jr st
Requisites: None
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 508 - LANDSCAPE AND SETTLEMENT IN THE NORTH AMERICAN

## PAST

3 credits.
Historical geography of North American settlement patterns, cultural landscapes, regional identity and heritage. Enroll Info: Junior standing

## Requisites: None

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 2013
GEOG 510 - ECONOMIC GEOGRAPHY
4 credits.
Theoretical aspects of spatial economic distributions and locational analysis. Enroll Info: Junior standing
Requisites: None
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 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. Enroll Info: So St
Requisites: None
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 <br> 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 21 st-century climate change. Laboratory section emphasizes multivariate data analysis and quantitative paleoecological inference. Enroll Info: None
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 2020
GEOG/GEOSCI 524 - ADVANCED LANDFORM GEOGRAPHY 3 credits.

Purposes, methods, and content of analysis of landforms, with emphasis on quantitative descriptive regional variation, and functional relationships. Enroll Info: Cons inst or Jr st
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2011

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. Enroll Info: 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 2019

## 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. Enroll Info: None
Requisites: Junior standing or 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
GEOG/GEOSCI 527 - THE QUATERNARY PERIOD
3 credits.
Principles of Quaternary studies emphasizing terrestrial records and paleoecology of the past two million years and comparisons with the deep ocean record and models of climatic change. Enroll Info: 1 intermedlevel course in physical geog or geosci; or consent of instructor
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: Jr st or one year calculus-based college physics or introduction to weather and climate; or cons inst
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
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 GIS data, applications, analytical tools, and implementation issues. Enroll Info: None
Requisites: GEOG/CIV ENGR/ENVIR ST 377
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/ENVIR ST 534 - ENVIRONMENTAL GOVERNANCE: MARKETS, STATES AND NATURE
3 credits.
This class is designed to help students answer real-world questions of how the environment is managed and governed through state policy, economics, and social institutions. We will cover strategies within and outside of the formal institutions of government, and extend the discussion to the commodification of nature and the use of science to understand and govern the environment. The last third of the class will consist of students engaging with case studies of environmental governance in water, carbon, species, and urban sustainability. Enroll Info:

## None

Requisites: ENVIR ST/GEOG 339, ENVIR ST/GEOG 439, or ENVIR ST/
F\&W ECOL 515
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016
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. Enroll Info: Geog/IES 339 or equiv Requisites: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: Jr st
Requisites: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Sophomore standing
Requisites: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
GEOG 560 - ADVANCED QUANTITATIVE METHODS
3 credits.
Selected topics in the analysis of spatial distributions with emphasis on multivariate techniques. Enroll Info: GEOG 360 or equiv; Jr st
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: Geog majors or cons inst
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: Fall 2020

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. Enroll Info: Junior standing
Requisites: None
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. Enroll Info: GEOG 370 or consent of instructor
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GEOG 573 - ADVANCED GEOCOMPUTING AND GEOSPATIAL BIG DATA ANALYTICS <br> 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. The knowledge and skills learned further prepare students for an emerging career in geospatial data science. Enroll Info: None Requisites: GEOG 378
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 2020

GEOG 574 - GEOSPATIAL DATABASE DESIGN AND DEVELOPMENT 4 credits.

Introduces the basic concepts, techniques and methodologies for designing and implementing a spatial database. The course prepares students for professional work as a GIS designer, analyst, specialist or researcher who\uses spatial databases to store, manage and manipulate digital geographic data. Students learn how to design conceptual spatial database models, and how to implement them within specific spatial data management systems (DBMS). The course covers the basics of the 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. Enroll Info: GEOG/CIV ENGR/

## ENVIR ST 377

## 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 2020
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. Enroll Info: GEOG 370 and Comp Sci 302, or consent of instructor

## 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG 576 - GEOSPATIAL WEB AND MOBILE PROGRAMMING
4 credits.
This course is designed to cover 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. Previous java programming knowledge is not essential, but basic programming experience is required. Enroll Info: None
Requisites: Graduate standing OR one introductory GIS course
(GEOG 170, GEOG 370 or ENVIR ST/CIV ENGR/GEOG 377) and one programming course (GEOG 378, COMP SCI 301, COMP SCI 302, or COMP SCl 367)
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

GEOG 577 - ENVIRONMENTAL MODELING WITH GIS
3 credits.
This course focuses on environmental modeling using geographic information systems. The course provides an overview of physical environmental processes and focuses on discussion of the GIStechniques used to parameterize these processes. The discussion will be illustrated by widely used GIS-based environmental models. Enroll Info: GEOG/CIV ENGR/ENVIR ST 377 or equiv Geog 325 or equiv

## 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
Last Taught: Fall 2009
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. Enroll Info: GEOG/CIV ENGR/ENVIR ST 377 370, or equiv 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
Last Taught: Spring 2020
GEOG 579 - GIS AND SPATIAL ANALYSIS
4 credits.
Principles and algorithms for spatial analysis in geographic imformation 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. Enroll Info: GEOG/CIV ENGR/ENVIR ST 377 or equiv, GEOG 360, or consent of instructor
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG 602 - INTERNSHIP
1-2 credits.
Students may earn no more than two internship credits toward the 30-40 credits in geography. Enroll Info: Stdts should be declared Undergrad majors or Grad stdts in geography
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.
Topics vary. Enroll Info: Jr, Sr, or Grad st, or cons inst
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
Last Taught: Spring 2019
GEOG 676 - SPECIAL TOPICS IN GEOGRAPHY
3 credits.
Topics vary. Enroll Info: Jr, Sr, or Grad st, or cons inst
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: Yes, unlimited number of completions
Last Taught: Spring 2019
GEOG 681 - SENIOR HONORS THESIS
2-3 credits.
Enroll Info: None
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
GEOG 682 - SENIOR HONORS THESIS
2-3 credits.
Enroll Info: None
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 2020
GEOG 691 - SENIOR THESIS
2-3 credits.
Enroll Info: Sr st and cons inst
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
GEOG 692 - SENIOR THESIS
2-3 credits.
Enroll Info: Sr st and cons inst
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

GEOG 698 - DIRECTED STUDY
1-3 credits.
$\mathrm{Cr} / \mathrm{N}$. Enroll Info: Jr or Sr st. Graded on a $\mathrm{Cr} / \mathrm{N}$ basis; requires cons inst
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 2016
GEOG 699 - DIRECTED STUDY
1-3 credits.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020
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. Enroll Info: Grads: 3 cr, undergrads: 1 cr; or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## GEOG 777 - CAPSTONE IN GIS DEVELOPMENT

4 credits.
In this course students will work through a set of practical and challenging cases in GIS which require programming and other GIS development skills (such as geospatial algorithm development and implementation) to complete. The these 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. Through these activities students will learn how to integrate the skills they learned from other courses into a GIS development project. Enroll Info: None Requisites: GEOG $378,572,574,575,576$, and 579
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG 778 - PRACTICUM IN GIS DEVELOPMENT
4 credits.
The course learning objectives are: 1) To develop student's ability to conceive real world GIS development projects and design a plan for solving the projects; 2) To provide student the practical experience on managing GIS development projects; 3) To develop student's capacity to solve GIS development problems independently. Students taking this class will achieve these objectives in three stages. Stage 1: The students will be given a GIS development problem which will require them to define the context and the scope of a project to address this problem, to identify the key issues in solving this problems, and to develop implementation plan as well as to implement the plan. In this stage the students will be trained on their independence on developing strategies and solutions to the problems (issues) as they arise during the process of solving a GIS development project. Stage 2: The student is first asked to conceive, in consultation with the instructor(s), a project requiring substantial amount of GIS programming and development, and then to define the scope and to develop the implementation plan as well as to implement the plan for solving this GIS development project. During this stage, the students are trained to derive GIS development projects from real world situation on their own and solve the GIS development problems on their own. The instructors will act as the clients as well as technical advisors to the projects. Stage 3: students will summarize their experiences by reflections on various aspects of developing and implementing the above two projects to assess the learning outcomes for this classes and to provide recommendations for people who engage in this type of GIS development projects. Enroll Info: None
Requisites: GEOG 378, 572,574,575,576, and 579
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG 799 - INDEPENDENT READING
1-3 credits.
Enroll Info: None
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

GEOG 900 - SEMINAR IN GEOGRAPHY
1-3 credits.
Enroll Info: None
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.
Enroll Info: None
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
GEOG 918 - SEMINAR IN POLITICAL GEOGRAPHY
2-3 credits.
Enroll Info: None
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.
Enroll Info: None
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
GEOG 930 - SEMINAR IN PEOPLE-ENVIRONMENT GEOGRAPHY
2-3 credits.
Analysis of people-nature links, including environmental issues, natural resources, and attitudes toward nature. Topics vary with each offering.
Enroll Info: None
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

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. Enroll Info: None
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. Enroll

## Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOG 970 - SEMINAR IN GEOGRAPHIC INFORMATION SCIENCE
1-3 credits.
Enroll Info: None
Requisites: 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
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. Enroll Info: None
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. Enroll Info: None
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

## GEOG/AFRICAN/ANTHRO/ECON/HISTORY/POLI SCI 983 -

 INTERDEPARTMENTAL SEMINAR-AFRICAN STUDIES3 credits.
Interdisciplinary inquiry in African society and culture. Enroll Info: None 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

GEOG 990 - RESEARCH AND THESIS
1-9 credits.

## Enroll Info: None

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
GEOG 999 - INDEPENDENT WORK
1-3 credits.
Enroll Info: None
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

## GEOLOGICAL ENGINEERING (G L E)

## 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. Enroll Info: So st Requisites: None
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## G LE 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: E M A 202 or M E 240 or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## G L E/GEOSCI 350 - INTRODUCTION TO GEOPHYSICS: THE DYNAMIC EARTH <br> 3 credits.

Methods of geophysics applied to earth structure and plate tectonics. Principles of seismology, gravity, geodesy, magnetism and heat flow.
Enroll Info: MATH 221
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 2020

## G L E/GEOSCI 360 - PRINCIPLES OF MINERALOGY

3 credits.
Minerals, their physical and chemical properties, crystallography, and geologic significance. Enroll Info: 1 sem college chem or concurrent registration
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
G L E/GEOSCI 370 - ELEMENTARY PETROLOGY
3 credits.
Igneous, sedimentary and metamorphic rocks, studied in hand sample and thin section. Enroll Info: GEOSCI/G LE 360
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## G L E/ENVIR ST/F\&W ECOL/GEOG/GEOSCI/LAND ARC 371 INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING <br> 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. Enroll Info: MATH 114 Sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## G L E/ENVIR ST/F\&W ECOL/GEOG/GEOSCI/LAND ARC 372 INTERMEDIATE ENVIRONMENTAL REMOTE SENSING <br> 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. Enroll Info: Envir St 301 or consent of instructor, sophomore standing
Requisites: None
Course Designation: Level-Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015
G LE 401 - SPECIAL TOPICS IN GEOLOGICAL ENGINEERING 1-3 credits.

Course will focus on a variety of topics in the field of geological engineering. Enroll Info: Jr st
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## G LE/CIV ENGR 421 - ENVIRONMENTAL SUSTAINABILITY ENGINEERING <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## G L E/CIV ENGR 430 - INTRODUCTION TO SLOPE STABILITY AND EARTH RETENTION <br> 1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures. Enroll Info: None
Requisites: CIV ENGR/G LE 330, 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/GEOSCI 431 - SEDIMENTARY \& STRATIGRAPHY LAB 1 credit.

Field- and specimen-based laboratory course in Sedimentology Stratigraphy; emphasizes qualitative and quantitative description and interpretation of sediments and sedimentary deposits. Enroll Info: GEOSCI 204, GEOSCI/G LE 360, GEOSCI/G LE 370
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 2020

## G LE/CIV ENGR 432 - INTRODUCTION TO SHALLOW AND DEEP FOUNDATION SYSTEMS <br> 1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures. Enroll Info: None
Requisites: CIV ENGR/G LE 330, graduate/professional standing, or member of Engineering Guest Students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## GLE/CIV ENGR 434 - INTRODUCTION TO UNDERGROUND OPENINGS ENGINEERING <br> 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. Enroll Info: None
Requisites: CIV ENGR/G L E 330 and concurrent enrollment in GEOSCI/ CIV ENGR/G LE/M S \& E 474, 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/ENVIR ST/GEOSCI 444 - PRACTICAL APPLICATIONS OF GPS SURVEYING <br> 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. Enroll Info:
Math 210, 211, 221 or equiv or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## G LE/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. Enroll Info: GEOSCI 202, 204, one term of physics. GEOSCI/G LE 360 and 370 recommended or concurrent registration
Requisites: GEOSCI 202 \& 204 \& 360
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

## 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 nonlinear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications. Enroll Info:
None
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 2020

## G LE 479 - GEOLOGICAL ENGINEERING DESIGN

3 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. Enroll Info: Sr st cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## G LE 489 - HONORS IN RESEARCH

1-3 credits.
Undergraduate honors research projects supervised by faculty members. Not available for graduate credit. Enroll Info: Admission to the GLE honors in research 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 Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info: None
Requisites: (CIV ENGR/G L E 291, COMP SCI 220, or E C E 203) and
(CIV ENGR 310 or 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: Yes, unlimited number of completions Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Senior standing, (MATH 211, 217, 221, or 275), (CHEM 103, 104, or 109), and CIV ENGR 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

## 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. Enroll Info: CIV ENGR/G L E 330

## Requisites: None

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: CIV ENGR/G LE 330 COMP SCI 310 or cons inst Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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). Enroll Info: None
Requisites: PHYSICS 201, 207, 247, E M A 201, or graduate/professional standing, or member of Engineering Guest Students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No

## 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. The focus of this course will thus be 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. Enroll Info: None
Requisites: MATH 222 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

## 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. The course will cover the basic physics of each method and modeling techniques and field procedures. Enroll Info: 1 yr of college calc, 1 yr of college physics
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 2020

## G L E/GEOSCI 595 - FIELD METHODS IN APPLIED AND ENGINEERING GEOPHYSICS <br> 1 credit.

The application of geophysical field methods for delineating near-surface features and/or structures as applied to engineering, environmental and exploration problems. Enroll Info: 1 yr coll calc, 1 yr coll physics or EMA 201, 202 PHYSICS 202, prev or con reg in Geoscience 594
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 2020

## 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. Enroll Info: None
Requisites: M S \& E/GEOSCI/CIV ENGR/G L E/M S \& E 474, 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
GLE 597 - BOREHOLE GEOPHYSICS
3 credits.
Examines the use of borehole geophysical techniques to characterize geological materials, structures, and formation fluids in the region surrounding a well bore. Applications include formation evaluation for oil exploration, hydrologic, environmental, and mineral deposit characterization, and geoengineering analysis. Enroll Info: 1 yr coll calc, 1 yr coll physics or EMA 201, 202 PHYSICS 202, Geology 594
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## GLE/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-plantatmosphere continuum, application and development of models for simulating ecohydrologic processes, and case studies on ecohydrologic function and ecosystem services of varied environments. Enroll Info:

## None

Requisites: CIV ENGR 311, 415, or GEOSCI/G L E 627, or graduate/ professional standing (or CIV ENGR 315 prior to Spring 2018)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020

## GLE/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; problem sets and class projects. Enroll Info: Intro course in geol, Jr st
MATH 221 or equiv
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## G LE/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; problem sets and group projects. Enroll Info: Geoscience 627 and college level chemistry or cons inst
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## GLE/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. Enroll Info:
CIV ENGR 320330
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## GLE 699 - INDEPENDENT STUDY

1-3 credits.

## Enroll Info: None

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 2020

## 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. Students develop their own codes and are introduced to packaged models, including those developed by the U. S. Geological Survey. Enroll Info: GEOSCI/G L E 627 or equivalent, calculus
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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.
Enroll Info: CIV ENGR/G L E 330
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 geoengineering problems of flow and stability. Enroll Info: Grad st Civ Engr/GLE 330 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## G LE/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. Enroll Info: CIV ENGR/G LE 330 or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## G LE/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 liquifaction; dynamic analysis of earth dams; settlements resulting from earthquakes, lateral earth pressures during earthquakes; foundation vibrations. Enroll Info: Civ Engr/EMA 530, EMA 545 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## GLE/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## G LE/GEOSCI 757 - ADVANCED ROCK MECHANICS <br> 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. Enroll Info: 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

GLE 790 - MASTER'S RESEARCH OR THESIS
1-9 credits.
Enroll Info: Master's candidates only
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 2020
G LE 801 - SPECIAL TOPICS IN GEOLOGICAL ENGINEERING
1-3 credits.
Enroll Info: None
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.
Enroll Info: For post-master's, pre-dissertator 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 2020
GLE 900 - SEMINAR
1 credit.
Enroll Info: None
Requisites: 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

## G LE 990 - RESEARCH AND THESIS

1-9 credits.
Enroll Info: For students with dissertator status 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: Fall 2020

## G LE 999 - INDEPENDENT WORK

1-3 credits.
Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Not open to students with credit for GEOSCI 101, 109, or GEOSCI/ENVIR ST 106
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
GEOSCI/ATM OCN/ENVIR ST 102 - CLIMATE AND CLIMATE CHANGE
3 credits.
This course 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: High school physics or chem recommended. Open to Freshmen
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 2020

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. Lecture and discussion. Enroll Info:
Not open to those who have had Geosci 101, 100, or 109. Open to Fr
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## GEOSCI 107 - LIFE OF THE PAST

3 credits.
Minerals, rocks, geologic time; origin of life; paleobiology, evolution and classification of fossil plants, invertebrates, and vertebrates. Lecture, lab. Field trip optional. Enroll Info: Not open to those who have had GEOSCI 204. Open to Fr
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 2012
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. In aggregate, the course provides the student with a view of the geological evolution of the Earth using specific examples that they are likely to visit in their lifetime. Enroll Info: None
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 2020

## GEOSCI 110 - EVOLUTION AND EXTINCTION

4 credits.
Contemporary views of the origin and diversification of life; crises in the history of life, with emphasis on controversies regarding mass extinctions, particularly at the close of the Paleozoic and Mesozoic eras. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
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.

This internet course will examine the earth and environmental science behind the news with the goal of producing more informed and knowledgeable citizens. The content will vary from semester to semester as topical modules become available. Enroll Info: Open to Fr. Not open to stdts who have completed other 100-level Geoscience crses
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.

This course will explore the diversity of microbial life forms in modern and ancient geological environments, with a focus on extreme environments of geological origin or relevance. Inquire-based activities will include exploration of unusual aspects of microbial life in everyday settings, as well as preparation and presentation of individual projects. Enroll Info: None
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 2020
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## 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? The course will also address hazard assessment, forecasting, and mitigation to lessen their impact on society. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020
GEOSCI 198 - DIRECTED STUDY
1-3 credits

Enroll Info: Graded on a $\mathrm{Cr} / \mathrm{N}$ basis; requires cons inst
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 2012

GEOSCI 199 - DIRECTED STUDY
1-3 credits.
Enroll Info: None
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 2020

## 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. Enroll Info: GEOSCI 100, 101, 106, 109 or cons inst 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 2020
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. Lecture, lab, and field trips. Enroll Info: GEOSCI 100, 101, 106, 109 or cons inst
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: Spring 2020

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. Enroll Info: GEOSCI 204 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

GEOSCI/GEOG 320 - GEOMORPHOLOGY
3 credits.
Principles and analysis of geomorphic processes and resulting land
forms. Field trip. Enroll Info: One of the following: GEOSCI 100, 101, 106, 109, 204, GEOG/ENVIR ST 120, 127
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. When taught by Knox, major emphasis on surface water hydrology, erosion, sedimentation, and physical characteristics of streams and rivers. Enroll Info: Intro phy geog or phy geosci crse, or cons inst
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
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.

This online course covers many of the important aspects of gemology. It explores the formation, collection, properties, and treatment of many popular gemstones. Enroll Info: Jr st. Stdts who have taken Geosci 306 are not eligible for 331. GEOSCI 331 does not count toward the geol major 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 2020

## GEOSCI 333 - THE AGE OF DINOSAURS

3 credits.
This course, intended for non-majors, will survey the evolution and paleobiology of important groups of vertebrates that lived during the Mesozoic Era. Animals that will be covered include dinosaurs, crocodilians, pterosaurs, lizards, turtles, and synapsids. Enroll Info: None 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 2012
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.

## Enroll Info: None

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 2020
GEOSCI/G LE 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.
Enroll Info: MATH 221
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 2020
GEOSCI/G LE 360 - PRINCIPLES OF MINERALOGY
3 credits.
Minerals, their physical and chemical properties, crystallography, and geologic significance. Enroll Info: 1 sem college chem or concurrent registration
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GEOSCI/G LE 370 - ELEMENTARY PETROLOGY

3 credits.
Igneous, sedimentary and metamorphic rocks, studied in hand sample and thin section. Enroll Info: GEOSCI/G LE 360
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: MATH 114 Sophomore standing

## Requisites: None

Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
GEOSCI/ENVIR ST/F\&W ECOL/G LE/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. Enroll Info: Envir St 301 or consent of instructor, sophomore standing

## Requisites: None

Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: GEOSCI/G L E 360 and CHEM 109; and GEOSCI/G LE 370 or con reg; or cons inst
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 2020

## GEOSCI 376 - TOPICS IN GEOLOGY

1-3 credits.
Special topics or discussions of recent research. To be given as the need and opportunity arise. Different sections of this course may be simultaneously offered in two or more areas of geology. May be repeated for credit. Enroll Info: None
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 2020

GEOSCI 402 - RESEARCH AND COMMUNICATION IN THE GEOLOGICAL SCIENCES
3 credits.
Students will learn skills and strategies to conduct research in the geological sciences. This approach requires 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, students will find, evaluate, and utilize information in the existing scientific literature. Students will also practice effective scientific communication skills, including writing, oral presentations, and producing effective visualizations. Intended as a capstone experience for students in the Geology and Geophysics major. Enroll Info: None
Requisites: Senior standing and Declared in Geology and Geophyics
Course Designation: Gen Ed-Communication Part B
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
GEOSCI/ENVIR ST 411 - ENERGY RESOURCES
3 credits.
Sources, availability of fuels. Energy conversion and efficiency. Consumption patterns and trends. Environmental consequences of energy production and use. Policy considerations and alternatives. Enroll Info: Crse in college level math a crse in phy sci or cons inst
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOSCI/GEOG 420 - GLACIAL AND PLEISTOCENE GEOLOGY
3 credits.

Principles, characteristics and work of glaciers; events of the
Pleistocene. Field trip. Enroll Info: GEOSCI 100, 101, 106 or 109 or GEOG/ ENVIR ST 120
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

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. Enroll Info: Geosci 203 or GEOSCI/G LE 360 370; GEOSCI 204; and GEOSCI 100, 101 or 106

## 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
GEOSCI/G LE 431 - SEDIMENTARY \& STRATIGRAPHY LAB
1 credit.
Field- and specimen-based laboratory course in Sedimentology Stratigraphy; emphasizes qualitative and quantitative description and interpretation of sediments and sedimentary deposits. Enroll Info:
GEOSCI 204, GEOSCI/G LE 360, GEOSCI/G LE 370
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 2020
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. Enroll Info:
Math 210,211, 221 or equiv or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## GEOSCI/G LE 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. Enroll Info: GEOSCI 202, 204, one term of physics. GEOSCI/G LE 360 and 370 recommended or concurrent registration
Requisites: GEOSCI 202 \& 204 \& 360
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

GEOSCI 456 - GEOLOGIC FIELD METHODS
2 credits.
Theory and techniques of geologic mapping; field trips. Geology 456
cannot be taken in lieu of Geology 459. Enroll Info: GEOSCI/G LE 455
must be taken con reg
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 2019
GEOSCI 457 - CONDUCTED FIELD TRIP
2 credits.
A one or two week trip primarily for the study of the principles and methods of geologic mapping. Enroll Info: Cons inst; GEOSCI/G L E 370 or con reg
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 2020

## GEOSCI 459 - FIELD GEOLOGY

6 credits.
Detailed geologic mapping and solution of related problems in the field. A multi institutional course based at Park City, Utah. Enroll Info: Geosci 203 or GEOSCI/G LE 360 370; GEOSCI/G LE 455; cons inst
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: Summer 2019

## GEOSCI/CIV ENGR/G LE/M S \& E 474 - ROCK MECHANICS

3 credits.
Classification of rock masses, stress and strain in rock, linear and nonlinear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications. Enroll Info: None
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 2020

GEOSCI/HIST SCI 514 - HISTORY OF GEOLOGIC THOUGHT 3 credits.

Major concepts from earliest to modern times. Enroll Info: Sr st, GEOSCI 100 or 101204 or cons inst
Requisites: None
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
GEOSCI 515 - PRINCIPLES OF ECONOMIC GEOLOGY
4 credits.
(Open to mining engineering students for 3 cr .) Composition, structure, occurrence, origin, and economic investigation of important groups of mineral deposits; problems of mineral deposition. Enroll Info: Geosci 203 or GEOSCI/G LE 360 370; GEOSCI 204; or cons inst
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 2018

## GEOSCI 517 - MONSTERS AND SCIENCE: A HISTORY OF VERTEBRATE PALEONTOLOGY

3 credits.
This course will explore the history of vertebrate paleontology, concentrating on the 19th through 21 st centuries. The shifting and sometimes uncomfortable relations between paleontology and other sciences, the arts and the public will be a major theme of the course.
Enroll Info: Junior standing
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: Spring 2013
GEOSCI/GEOG 524 - ADVANCED LANDFORM GEOGRAPHY
3 credits.
Purposes, methods, and content of analysis of landforms, with emphasis on quantitative descriptive regional variation, and functional relationships. Enroll Info: Cons inst or Jr st
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2011

GEOSCI/GEOG 527 - THE QUATERNARY PERIOD
3 credits.
Principles of Quaternary studies emphasizing terrestrial records and paleoecology of the past two million years and comparisons with the deep ocean record and models of climatic change. Enroll Info: 1 intermedlevel course in physical geog or geosci; or consent of instructor
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. The focus of this course will thus be 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. Enroll Info: None
Requisites: MATH 222 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/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. Enroll Info: GEOSCI 304 or 540 or course in introductory biology
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: 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. Enroll Info: GEOSCI 107, 110, 204, or a course in introductory biology
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
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. Enroll Info: None
Requisites: GEOSCI 100, ATM OCN/GEOSCI 105, ENVIR ST/GEOSCI 106, GEOSCI 110, or ENVIR ST/GEOG 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: Fall 2020
GEOSCI 556 - MOUNTAIN BELTS
3 credits.
Examination of interaction of tectonic plates and the resulting structures
Enroll Info: Geoscience 455
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: Spring 2018
GEOSCI 557 - STRUCTURAL PETROLOGY
3 credits.
Petrographic investigation of rock fabrics and deformation using thin sections. Use of microscopes and U-stage. Enroll Info: Geosci 203 or GEOSCI/G L E 360 370; GEOSCI/G L E 455; or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

GEOSCI/G LE 594 - INTRODUCTION TO APPLIED GEOPHYSICS 3 credits.

Survey of applied geophysics, including seismic refraction, seismic reflection, electrical resistivity, gravity, and magnetics methods. The course will cover the basic physics of each method and modeling techniques and field procedures. Enroll Info: 1 yr of college calc, 1 yr of college physics
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 2020

## GEOSCI/G LE 595 - FIELD METHODS IN APPLIED AND ENGINEERING GEOPHYSICS <br> 1 credit.

The application of geophysical field methods for delineating near-surface features and/or structures as applied to engineering, environmental and exploration problems. Enroll Info: 1 yr coll calc, 1 yr coll physics or EMA
201, 202 PHYSICS 202, prev or con reg in Geoscience 594
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 2020
GEOSCI/G LE 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. Enroll Info: None
Requisites: M S \& E/GEOSCI/CIV ENGR/G L E/M S \& E 474, 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

## GEOSCI 610 - GEOCHRONOLOGY, TIMESCALES, AND RATES OF GEOLOGIC PROCESSES <br> 3 credits.

Application of radioisotopic (Ar-Ar, U-Pb, U-Th, U-He) and cosmogenic ( $\mathrm{He}, \mathrm{Ne}, \mathrm{Cl}, \mathrm{Be}, \mathrm{C}$ ) 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. Enroll Info: Geosci 203 or GEOSCI/G LE 360370 or equiv, or cons inst
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 2019
GEOSCI/G LE 627 - HYDROGEOLOGY
3-4 credits.
Mathematical treatment of the physical principles governing the flow of groundwater; emphasis on well hydraulics and flow system analysis; problem sets and class projects. Enroll Info: Intro course in geol, Jr st
MATH 221 or equiv
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
GEOSCI/G LE 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; problem sets and group projects. Enroll Info: Geoscience 627 and college level chemistry or cons inst
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
GEOSCI 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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

GEOSCI 682 - SENIOR HONORS THESIS
3 credits.

## Enroll Info: None

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 2020
GEOSCI 691 - SENIOR THESIS
$3-4$ credits.
The senior thesis involves research conducted in collaboration with a faculty member (non honors students). Enroll Info: Major in geology and geophysics or geological engineering
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
GEOSCI 692 - SENIOR THESIS
3-4 credits.
The senior thesis involves research conducted in collaboration with a faculty member (non honors students). Enroll Info: Major in geology and geophysics or geological engineering
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
GEOSCI 698 - DIRECTED STUDY
1-6 credits.
Enroll Info: Jr or Sr st . Graded on a $\mathrm{Cr} / \mathrm{N}$ basis; requires cons inst
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.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst 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 2020

## 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. Designed to be accessible to students from a range of disciplines, including geoscience, engineering, environmental science, and ecology. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 over the past 60 years. The glaciology component of class will be approximately $70 \%$ of total material covered, the remaining $30 \%$ of the course will address the topic of glacial landform building. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## GEOSCI/G LE 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. Students develop their own codes and are introduced to packaged models, including those developed by the U. S. Geological Survey. Enroll Info: GEOSCI/G L E 627 or equivalent, calculus
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## GEOSCI 727 - ADVANCED HYDROGEOLOGY

1-3 credits.
Advanced topics in Hydrogeology. Enroll Info: GEOSCI/G L E 627 and cons inst
Requisites: 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. Lectures, labs, and field work in and around Madison. Enroll Info: GEOSCI/G L E 627
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. Enrolling students should have completed all or most of the geology course requirements for an undergraduate major, in particularly sedimentary geology and stratigraphy. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
GEOSCI 732 - GEOCHEMISTRY OF SEDIMENTS
3 credits.
Processes involved in the origin of chemical sediments; shales,
carbonates, and evaporites. Enroll Info: GEOSCI/G L E 360, 370
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## GEOSCI 740 - MICROPALEONTOLOGY I

3 credits.
Microscopic fossils; conodonts, foraminifera, and ostracodes in particular; their biology, ecology, evolution, and stratigraphic distribution. Enroll Info: GEOSCI/ZOOLOGY 541
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014

## GEOSCI/G LE 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## GEOSCI/ATM OCN/ENVIR ST/ZOOLOGY 750 - PROBLEMS IN OCEANOGRAPHY <br> 3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
GEOSCI 755 - ADVANCED STRUCTURAL GEOLOGY
3 credits.
Structures in layered, intrusive, and metamorphic rocks; structural analysis. Enroll Info: GEOSCI/G L E 455 or equiv
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: 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

## 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. The course will emphasize critical reading and in-depth discussion of recent publications drawn from a variety of disciplines, including geophysical, geological, and geochemical studies and approaches. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
GEOSCI 765 - CRYSTAL CHEMISTRY
3 credits.
Principles of crystal chemistry, emphasizing the structure and behavior of rock forming minerals. Enroll Info: GEOSCI/G L E 360 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: Spring 2018

GEOSCI 771 - IGNEOUS PETROLOGY
3 credits.
Classification, characteristics, and petrogenesis of igneous rocks. Representative rock suites studied in lab. Enroll Info: Geosci 660 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GEOSCI 776 - INTERFACIAL BIOGEOCHEMISTRY
3 credits.
Geochemical basis for understanding reactions at interfaces between mineral surfaces, dissolved organic compounds, biomembranes and aqueous solutions. Topics include sorption, heterogeneous nucleation, mineral dissolution kinetics electric double-layer theory, surfacecomplexation models, surface spectroscopy, interfacial thermodynamics, biomineralization biomimetic materials synthesis, early evolution of life.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

## 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; plus lab. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
GEOSCI 793 - GEOPHYSICAL INVERSE THEORY
3 credits.
Application of inverse methods to geophysical measurements of the structure of the earth. Enroll Info: None
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. Enroll Info: PHYSICS 322, MATH 322
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

GEOSCI 875 - ADVANCED TOPICS IN GEOLOGY
1-3 credits.
Enroll Info: None
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

## GEOSCI/ATM OCN/BOTANY/CIV ENGR/ENVIR ST/ZOOLOGY 911 LIMNOLOGY AND MARINE SCIENCE SEMINAR <br> 1 credit.

Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst
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

GEOSCI 920 - SEMINAR IN GLACIAL AND PLEISTOCENE GEOLOGY
1-3 credits.
Subjects selected; field trips. Enroll Info: GEOSCI/GEOG 320420 or cons inst
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
GEOSCI 929 - SEMINAR-HYDROGEOLOGY
1-2 credits.
Subject selected. Enroll Info: GEOSCI/G L E 627 cons inst
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
GEOSCI 940 - SEMINAR IN PALEONTOLOGY
1 credit.
Enroll Info: Geosci 540-541
Requisites: 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 955 - SEMINAR-STRUCTURAL GEOLOGY
2 credits.
Enroll Info: GEOSCI/G L E 455 or equiv or cons inst
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 2011

## GEOSCI 970 - SEMINAR-GEOCHEMISTRY

2 credits.
Enroll Info: None
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
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. Enroll Info: None
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.

Enroll Info: None
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
GEOSCI 991 - SEMINAR: GEOPHYSICS
1-3 credits.
Enroll Info: None
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.
Enroll Info: None
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.
For beginners; emphasis on proficiency in German through speaking, listening, reading, and writing, and on communication in cultural context. Five class hours per week. Enroll Info: None
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 2020
GERMAN 102 - SECOND SEMESTER GERMAN
4 credits.
Continuation of skill development from 101. Five class hours per week.
Enroll Info: GERMAN 101 or appropriate score on placement exam. Open to Freshmen
Requisites: None
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: Fall 2020
GERMAN 111 - FIRST SEMESTER DUTCH
4 credits.
For beginners; emphasis on proficiency in Dutch through speaking, listening, reading, and writing, and on communication in cultural context. Four class hours per week. Enroll Info: None
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 2020
GERMAN 112 - SECOND SEMESTER DUTCH
4 credits.
Continuation of skill development begun in Dutch 111. Four class hours
per week. Enroll Info: Dutch 111 or cons inst. Open to Fr
Requisites: None
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

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. Enroll Info: GERMAN 102 or appropriate score on placement exam. Open to Freshmen
Requisites: None
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

## GERMAN 204 - FOURTH SEMESTER GERMAN

4 credits.

Continuation of skills development from 203. Enroll Info: GERMAN 203 or
appropriate score on placement exam. Open to Freshmen
Requisites: None
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 2020
GERMAN 213 - THIRD SEMESTER DUTCH
4 credits.
Review of Dutch grammar and continuation of systematic vocabulary development. Enroll Info: Dutch 112 or cons inst
Requisites: None
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

## GERMAN 214 - FOURTH SEMESTER DUTCH

4 credits.
Reading and discussion of texts dealing with the cultural history of the Netherlands and Flanders as well as samples of modern Dutch fiction. Enroll Info: Dutch 213 or cons inst
Requisites: None
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

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. Completion of this course will provide students with a strong linguistic preparation for study in a Dutchspeaking university. Enroll Info: None
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.
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. Enroll Info: None
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. Enroll Info: None
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

GERMAN 249 - INTERMEDIATE GERMAN - SPEAKING AND LISTENING 3 credits.

Drawing mainly on contemporary audio and video materials from German-speaking countries, students will deepen their appreciation of German as a spoken language by learning how native speakers vary their use of sound structures, vocabulary, and grammar according to speech situation. Enroll Info: GERMAN 204 or appropriate UW-System German Placement Test score or cons inst
Requisites: None
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: Fall 2020

GERMAN 258 - INTERMEDIATE GERMAN-READING
3 credits.
Students will develop their reading skills in working with literary and cultural texts from 1800 to the present. The course emphasizes close reading, textual analysis, historical context, and the use of appropriate reading strategies. Enroll Info: GERMAN 204 or appropriate UW-System German Placement Test score or consent of instructor
Requisites: None
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: Fall 2020
GERMAN 262 - INTERMEDIATE GERMAN-WRITING
3 credits.
This course will strike a balance between individual and collaborative writing and between teacher- and student-guided writing activities. Students' writings will rely on authentic text models, many with Germanspecific cultural connotations. Longer-term writing projects will alternate with short-term writing assignments. Enroll Info: GERMAN 204 or appropriate UW-System German Placement Test score or consent of instructor
Requisites: None
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: Fall 2020
GERMAN 266 - TOPICS IN GERMAN AND/OR YIDDISH CULTURE 3 credits.

Introduction to diverse cultural expressions of German and/or Yiddish speakers worldwide. Readings and lectures in English. Enroll Info: None 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/JEWISH 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. Enroll Info: For Communication B sections, satisfied Communication A requirement
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 2020

## GERMAN/JEWISH/LITTRANS 269 - YIDDISH LITERATURE AND CULTURE IN EUROPE <br> 3 credits.

Exploration of European Yiddish fiction, poetry, folklore, and cinema, with a focus on works of the 19th and 20th centuries. Enroll Info: None
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
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.
Enroll Info: None
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: 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. Enroll Info: None
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 2020

## GERMAN 275 - KAFKA AND THE KAFKAESQUE

3 credits.
Franz Kafka (1883-1924) is an author whose impact on world literature cannot be overestimated. Born an Austrian Jew and living in the German-speaking Diaspora of Prague, he spent his days making a living as a successful employee of an insurance company and his nights desperately trying to create fiction that met his own exacting expectations. Constantly at odds with the demands of his family, friends, and fiancées/female acquaintances and plagued by poor health, Franz Kafka struggled his entire life long to reconcile the irreconcilable: life and writing. Kafka's texts demand a transdisciplinary and comparative approach. They forged a new level and quality of literature that has triggered innumerable responses in many languages, media, and discourses. The term "Kafkaesque" makes clear that the type and dimension of Kafka's texts have been perceived as strange, uncanny, and resistant to any classification. In the attempt to adopt or imitate the Kafkaesque, other authors situate themselves in the literary tradition of the uncanny, which in part relies on the mystified city of Prague with its long Jewish tradition, as well as on the tradition of Romantic and "Gothic" texts. In this course, we will read a wide selection of texts by Franz Kafka in order 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). Lectures will also highlight literature, film, and art works in the tradition of the Kafkaesque. Enroll Info: None
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

## GERMAN/LITTRANS 276 - SPECIAL TOPICS IN GERMAN AND WORLD LITERATURE/S <br> 3 credits.

Exploration of diverse world literary traditions, including German. All readings and lectures in English. Enroll Info: Sophomore standing
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: No
Last Taught: Spring 2020

## 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. Enroll Info: Open to Fr. Does not fulfill foreign language requirement and cannot be applied towards German major. Repeatable for cr with different topic

## 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

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. Enroll Info: None 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 2020

## 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. Enroll Info: Students with 5th semester placement should contact the instructor to determine eligibility for the course.
Requisites: GERMAN 204. Not open to students with credit for GERMAN 274 or 284
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
Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Fall 2018
GERMAN 298 - DIRECTED STUDY
1-3 credits.

Enroll Info: None
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 2018

## GERMAN 299 - DIRECTED STUDY

1-3 credits

## Enroll Info: None

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
GERMAN 303 - LITERATUR DES 19. JAHRHUNDERTS
3-4 credits.
Overview of 19th century German-language texts in historical and cultural contexts using a variety of genres and cultural artifacts, including fiction, drama, poetry, and popular songs. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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: Fall 2011
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. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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.

Designed to help graduate students acquire a minimal communication level of proficiency in Dutch through listening, speaking, reading, and writing. Four class hours per week. Enroll Info: Grad st
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 2020
GERMAN 312 - SECOND SEMESTER DUTCH FOR GRADUATE STUDENTS 3 credits.

Continuation of skill development begun in GERMAN 111/311. Four class hours per week. Enroll Info: Grad st and: GERMAN 111 or 311 or cons inst
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 2020

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. Enroll Info: Grad st and: GERMAN 112 or 312 or cons inst
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: Fall 2019
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.
Enroll Info: Grad st and: GERMAN 213 or 313 or cons inst
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 2019

## 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. Enroll Info: 4 sem Dutch or cons inst
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: Spring 2020

GERMAN 335 - DUTCH CONVERSATION AND COMPOSITION 3 credits.

A review of Dutch Grammar and vocabulary and intensive development of writing and speaking skills in Dutch. Completion of this course will provide students with a strong linguistic preparation for study in a Dutchspeaking university. Enroll Info: None
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. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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 2020
GERMAN 339 - BUSINESS GERMAN INTERNSHIP SEMINAR
4 credits.
Seminar in connection with the German Business Internship Program in Bonn, Germany. Enroll Info: Participation in German Business Internship Program in Bonn
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 2012
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. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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 2020

## GERMAN 352 - TOPICS IN GERMAN LINGUISTICS

3-4 credits.
Hands-on introduction to a topic in German language study. Course topics are designed to be relevant to future teachers of German as well as to those inclined to pursue graduate study in German philology/ linguistics. Enroll Info: GERMAN 351 or cons inst
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 2020

## GERMAN 362 - TOPICS IN GERMAN LITERATURE

3-4 credits.
Selected topics in the literature of German-speaking countries. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or
(GERMAN 249 and 284) 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: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: Current enrollment in a UW-Madison study abroad program, plus GERMAN 249, 238, and 262; or GERMAN 249 and 274 or 284
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 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 UWMadison study abroad program which has no equivalent on this campus. Enroll Info: Current enrollment in a UW-Madison study abroad program, plus GERMAN 249, 258 and 262; or GERMAN 249 and 274 or 284
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 2001

## GERMAN 369 - STUDY ABROAD IN GERMAN LINGUISTICS

2-5 credits.
Treatment of a topic in German linguistics in a course carried with a UWMadison study abroad program which has no equivalent on this campus. Enroll Info: Current enrollment in a UW-Madison study abroad program, plus GERMAN 249, 258, and 262; or GERMAN 249 and 274 or 284
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 2001

## GERMAN 372 - TOPICS IN GERMAN CULTURE

3-4 credits
Selected topics in the culture of German-speaking countries. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or
(GERMAN 249 and 284) 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: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: GERMAN 214
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
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. Enroll Info: GERMAN 214
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: 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. Enroll Info: GERMAN 214
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
GERMAN 385 - HONORS SEMINAR IN GERMAN LITERATURE
3 credits.
Selected topics in the literature of German-speaking countries for Honors students. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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 Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

GERMAN 391 - GERMAN FOR GRADUATE READING KNOWLEDGE I 3 credits.

Intensive grammar and reading course for seniors and graduate students.
May not be counted toward LS foreign language requirement. Enroll Info: Sr or Grad st
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 2020

GERMAN 392 - GERMAN FOR GRADUATE READING KNOWLEDGE II 3 credits.

Continuation of 391. May not be counted toward LS foreign language requirement. Enroll Info: Sr or Grad st plus GERMAN 391 or cons inst
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 2020
GERMAN 401 - FIRST-SEMESTER GERMAN FOR GRADUATE STUDENTS 3 credits.

For beginners; emphasis on proficiency in German through speaking, listening, reading, and writing, and on communication in cultural context.
Five class hours per week. Enroll Info: None
Requisites: Graduate 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 2020
GERMAN 402 - SECOND-SEMESTER GERMAN FOR GRADUATE
STUDENTS
3 credits.
Continuation of skill development from 401. Five class hours per week. Enroll Info: None
Requisites: Graduate 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 2020
GERMAN 403 - THIRD-SEMESTER GERMAN FOR GRADUATE STUDENTS
3 credits.
Four-skills approach (speaking, listening, wiriting, reading) centered around authentic texts, recordings, and images. Grammar review, concereted vocabulary expansion, and intensive practice. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

GERMAN 404 - FOURTH-SEMESTER GERMAN FOR GRADUATE STUDENTS
3 credits.
Continuation of skills development from 403. Enroll Info: None Requisites: Graduate Students Only
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
GERMAN 410 - KULTUR 1648-1918
3-4 credits.
Analyzes the German-speaking world from the 17th to early 20th centuries using variety of authors. Works include literary and historical texts, central texts from German sociologists, and art history. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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 2011
GERMAN 411 - KULTUR DES 20. UND 21. JAHRHUNDERTS
$3-4$ credits.
Analyzes the German-speaking world in the 20th and 21 st 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. Enroll Info: None
Requisites: (GERMAN 249, 258, and 262) or (GERMAN 249 and 274) or (GERMAN 249 and 284) 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: Spring 2020
GERMAN 445 - TOPICS IN DUTCH CULTURE
3-4 credits.
Topic in Dutch-language cultures. Enroll Info: GERMAN 214 or 314, or cons inst
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: Fall 2015

## GERMAN/JEWISH 510 - GERMAN-JEWISH CULTURE SINCE THE 18TH CENTURY <br> 3 credits.

Investigates German-Jewish culture since the 18th century, concentrating on toleration, emancipation, acculturation, assimilation, anti-Semitism, and Bildung. Enroll Info: Jr st
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 2020
GERMAN 560 - TOPICS IN GERMAN STUDIES
3 credits.
Topics will vary. Each seminar will focus on a topic in German Studies. The language of instruction and all course materials are in English.
Honors credit available. Enroll Info: Jr st or cons inst
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: Fall 2015
GERMAN 612 - GERMAN LITERARY MOVEMENTS SINCE 1750
3 credits.
Ideas and theories of literary movements exemplified in selected primary and secondary literature. Enroll Info: Grad st or two of: German 302, 303, 305, 375/385
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: GERMAN 314 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## GERMAN 632 - A THEME IN GERMAN LITERATURE

3 credits.
Enroll Info: Grad st or two of: German 302, 303, 305, 375/385
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
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. Enroll Info: A 300-level German lit crse with $B$ or better, or cons inst
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
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. Enroll Info: GERMAN 314 or cons inst
Requisites: None
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
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. Enroll Info: Sr st or cons inst

Requisites: None
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

GERMAN/MEDIEVAL 651 - INTRODUCTION TO MIDDLE HIGH GERMAN 3 credits.

Enroll Info: Advanced knowledge of German
Requisites: None
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 2020

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. Enroll Info: For German cr: one 300 level crse or above; or cons inst. For com arts cr. COM ARTS 350
Requisites: None
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 2015

GERMAN 676 - ADVANCED SEMINAR IN GERMAN STUDIES
3 credits.

Topics will vary. Each seminar will focus on a topic in German studies. Research opportunity for advanced students. Honors credit available. Enroll Info: GERMAN 3372 additional adv German crses or cons inst 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: Fall 2020

GERMAN 677 - SEMINAR IN GERMAN CULTURE STUDIES
3 credits.
Texts of a specific period of German cultural history (e.g., the Romantic era, the Baroque) are analyzed. Honors credit available. Enroll Info:
GERMAN 410 or 411 or 601 or cons inst
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 2017

GERMAN 681 - SENIOR HONORS THESIS-FIRST SEMESTER 3 credits

Enroll Info: None
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.

## Enroll Info: None

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 2020
GERMAN 683 - SENIOR HONORS SEMINAR IN GERMAN LITERATURE 3 credits.

Preparation of a seminar paper as a basis for a possible Honors Thesis. Enroll Info: GERMAN 385 or cons inst. Stdts may receive degree cr for no more than one of the following: German 673 or 683
Requisites: Declared in 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: Fall 2020

GERMAN 698 - DIRECTED STUDY
1-6 credits.
Enroll Info: Graded on a Cr/N basis; requires cons inst
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 2015
GERMAN 699 - DIRECTED STUDY
1-6 credits.

Enroll Info: Graded on a lettered basis; requires cons inst
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 2020
GERMAN 703 - 18TH CENTURY GERMAN LITERATURE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

GERMAN 708-19TH CENTURY GERMAN LITERATURE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
GERMAN 709 - GERMAN LITERATURE OF THE 20TH AND 21 ST
CENTURIES
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015
GERMAN 711 - SPECIAL TOPICS IN GERMAN LITERATURE
3 credits.
May be repeated for different topics. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
GERMAN 720 - COLLEGE TEACHING OF GERMAN
1 credit.
Enroll Info: Teaching assistantship in German
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GERMAN 722 - THEORY OF TEACHING GERMAN
2 credits.

Theory and methodology of teaching German as a second language.
Enroll Info: GERMAN 720 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Ph.D. stdt; teaching experience; cons inst
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: Ph.D. stdt; teaching experience; cons inst
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: Ph.D. stdt; teaching experience; cons inst
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
GERMAN 727 - TOPICS IN APPLIED LINGUISTICS
3 credits.
Selected issues in language acquisition and language teaching. Enroll Info: None
Requisites: 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
GERMAN 742 - TOPICS IN GERMAN CULTURAL STUDIES
3 credits.

Selected topics in German culture. Enroll Info: None
Requisites: 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
GERMAN/MEDIEVAL 755 - OLD GERMANIC LANGUAGES
3 credits.
Old High German, Old Saxon, and Gothic on a rotating basis; may be repeated for different languages. Enroll Info: Cons inst or GERMAN/ MEDIEVAL 651
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

GERMAN 758 - TOPICS IN CONTEMPORARY GERMAN
3 credits.
Topics announced; may be repeated for different topics. Enroll Info: None Requisites: 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
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. Enroll Info: None
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. Enroll Info: None
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
GERMAN/FRENCH/HISTORY/POLI SCI/SOC 804 - INTERDISCIPLINARY
WESTERN EUROPEAN AREA STUDIES SEMINAR
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GERMAN 940 - SEMINAR IN GERMAN LITERATURE
3 credits.
Second semester of introductory sequence. Continues integrated discussion of literary texts/topics and methodological issues at a more advanced level. Required for literature students. Taught each spring semester. Enroll Info: German 939
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

GERMAN 947 - SEMINAR IN GERMAN LITERATURE AND CULTURE 3 credits.

Subjects announced. Enroll Info: None
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
GERMAN 948 - SEMINAR IN GERMAN LITERATURE AND CULTURE 3 credits.

Enroll Info: None
Requisites: 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
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. Required for linguistics students. Taught each spring semester. Enroll Info: German 939
Requisites: 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

GERMAN 970 - ADVANCED SEMINAR IN GERMAN LINGUISTICS
3 credits.
Subjects announced. Enroll Info: None
Requisites: 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.

Conference hours to be arranged with the chairman. Enroll Info: None 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

GERMAN 991 - INDIVIDUAL RESEARCH LINGUISTICS AND GERMANIC
PHILOLOGY
1-9 credits.
Conference hours to be arranged with chairperson. Enroll Info: None 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

## GERMAN, NORDIC, AND SLAVIC (GNS)

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. Enroll Info: None
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. Enroll Info:
None
Requisites: None
Course Designation: Breadth - Humanities
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## GNS/HISTORY 265 - AN INTRODUCTION TO CENTRAL ASIA: FROM THE

 SILK ROUTE TO AFGHANISTAN3 credits
Examination of human geography, ethnicity, nomadism and pastoralism, oases cultures, religion and international politics of the silk routes of central Asia. Enroll Info: 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. Enroll Info: None
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

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. Enroll Info: Students who have taken LCA 314 prior to fall 2019 may not enroll in this course.
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. Enroll Info: Students must be admitted to the summer Turkish immersion program in order to enroll
Requisites: Consent of instructor
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Summer 2020
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. Enroll Info: None
Requisites: Enrolled in the Central Eurasian Studies Summer Institute (CESSI)
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 2020

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. Enroll Info: None
Requisites: Enrolled in the Central Eurasian Studies Summer Institute (CESSI)
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 2020
GNS 370 - TOPICS IN GNS (INTERMEDIATE)
3 credits.
Intermediate topics in German, Nordic, and/or Slavic culture, folklore, lingusitics, and/or language. Enroll Info: None
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
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. Enroll Info: Students should have completed GNS 340 or GNS 329.
Students must be admitted to the summer Turkish immersion program to enroll.
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: 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. Enroll Info: None
Requisites: GNS 332 (or LCA LANG 332 prior to fall 2018)
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 2020
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. Enroll Info: None
Requisites: GNS 431 (or LCA LANG 431 prior to fall 2018)
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 2020
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. Enroll Info: None Requisites: GNS 340 (or LCA LANG 340 prior to fall 2018)
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
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. Enroll

## Info: None

Requisites: GNS 439 (or LCA LANG 439 prior to fall 2018)
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 2020

GNS 451 - THIRD SEMESTER CENTRAL EURASIAN LANGUAGE 4 credits.

Third semester level language taught in an intensive 8-week summer language program. Enroll Info: None
Requisites: Enrolled in the Central Eurasian Studies Summer Institute (CESSI)
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 2020

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. Enroll Info: None

Requisites: Enrolled in the Central Eurasian Studies Summer Institute (CESSI)
Course Designation: Frgn Lang - 4th semester language course evel - 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

## GNS 529 - ADVANCED SUMMER IMMERSION TURKISH

 8 creditsContinues 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 Enroll Info: Students must be admitted to the summer Turkish immersion program in order to enroll. A placement test may be required.
Requisites: Consent of instructor
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 credits.
Building on skills developed in previous coursework, develop proficiency at the advanced level in listening, speaking, reading and writing. Enroll Info: None
Requisites: GNS 432 (or LCA LANG 432 prior to fall 2018)
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 2020
GNS 532 - SIXTH SEMESTER KAZAKH
3 credits.
Building on skills developed in fifth semester Kazakh, develop proficiency at the advanced level in listening, speaking, reading and writing. Enroll Info: None
Requisites: GNS 531 (or LCA LANG 531 prior to fall 2018)
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 2020

## 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. Enroll Info: None
Requisites: GNS 440 (or LCA LANG 440 prior to fall 2018)
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
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. Enroll Info: None
Requisites: GNS 539 (or LCA LANG 539 prior to Fall 2018)
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 2020

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. Enroll Info: None
Requisites: Enrolled in the Central Eurasian Studies Summer Institute (CESSI)
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 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. Enroll Info:

## None

Requisites: Enrolled in the Central Eurasian Studies Summer Institute (CESSI)
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 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. Enroll Info: 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## GREEK (CLASSICS) (GREEK)

## GREEK 103 - ELEMENTARY ANCIENT GREEK

4 credits.
An introduction to ancient Greek grammar and the development of basic reading skills. Enroll Info: None
Requisites: None
Course Designation: Frgn Lang - 1 st 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
GREEK 104 - SECOND SEMESTER GREEK
4 credits.
Enroll Info: GREEK 103, Open to Fr or So
Requisites: None
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

## GREEK 303 - FIRST SEMESTER GREEK

3-4 credits.
Forms and syntax, reading of easy Greek prose. Enroll Info: Jr st or cons inst; 3 cr for Grad students
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## GREEK 304 - SECOND SEMESTER GREEK

3-4 credits
Continuation of 303. Enroll Info: GREEK 303; 3 cr for Grad students
Requisites: None
Course Designation: 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 2017

## GREEK 305 - INTERMEDIATE GREEK

3 credits.

Selections from Plato's Dialogues, the New Testament, Homer's Iliad, and Herodotus. Enroll Info: GREEK 104 or 304
Requisites: None
Course Designation: Breadth - Literature. Counts toward the Humanities req
Frgn Lang - 3rd 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 306 - INTERMEDIATE GREEK
3 credits.

Continuation of 305. Enroll Info: GREEK 305
Requisites: None
Course Designation: Breadth - Literature. Counts toward the Humanities req
Frgn Lang - 4th 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 2020
GREEK 401 - GREEK DRAMA
3 credits.

Selected plays of Euripides or Sophocles; selections from the lyric poets. Enroll Info: GREEK 305-306
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

GREEK 505 - ELEMENTARY PROSE COMPOSITION
3 credits.
Enroll Info: None
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: Spring 2018
GREEK 510 - HOMER
3 credits.

Extensive reading in both Iliad and Odyssey. Enroll Info: GREEK 401 and 402 or cons inst
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
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. Enroll Info: GREEK 306 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2018

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. Enroll Info: GREEK 401-402 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2015

GREEK 520 - GREEK COMEDY
3 credits.
Close reading of several plays with attention to Aristophanes' lyric genius and political opinions. Enroll Info: GREEK 401 and 402 or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2017
GREEK 521 - GREEK TRAGEDY
3 credits.
Close reading of selected plays of Aeschylus, Sophocles or Euripides. Enroll Info: GREEK 401 and 402 or cons inst
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
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.
Become familiar with the work of Herodotus through a careful reading of Book 1 of his Histories. The main focus will be on accurate translation and comprehension of the original Greek and developing speed and fluency in your reading. Attention will be given to the structure of Herodotus' narrative, his literary precedents, intellectual milieu, methodology and relation to Greek tragedy Attention is given to diction, style, meter, character, and narrative. We will also consider larger questions of genre and interpretation. Enroll Info: None
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.
Continuation of 531. Enroll Info: GREEK 401 and 402 or cons inst
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
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. Enroll Info: None
Requisites: GREEK 303, 304, or 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
GREEK 551 - ATTIC ORATORS
3 credits.
Selected masterpieces from Antiphon to Hypereides, with emphasis upon the contribution of rhetoric to the intellectual life of the fourth century.
Enroll Info: GREEK 401 and 402 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
GREEK 560 - HELLENISTIC GREEK
3 credits.
A selection of texts, chiefly religious in content, pagan, Jewish, and Christian. Enroll Info: GREEK 401 and 402 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
GREEK 681 - HONORS THESIS
3 credits.
Enroll Info: None
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.

## Enroll Info: None

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.
Enroll Info: None
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.
Enroll Info: None
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.
Enroll Info: Jr or Sr st. Graded on lettered basis; requires cons inst 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 2019
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 in primary sources and secondary literature are selected from the reading lists for Classics in the PhD program in Classical and Ancient Near Eastern Studies. Enroll Info: None
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.
Enroll Info: None
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.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
GREEK 920 - SEMINAR-DRAMA
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
GREEK 930 - SEMINAR-HISTORY
3 credits.
Enroll Info: None
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 (first semester of Biblical Hebrew). Serves as basis for later forms of Classical Hebrew. Enroll Info: None
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.
Second semester of Biblical Hebrew. Continuation of Hebrew 103. Enroll Info: Hebrew 103
Requisites: None
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 303 - ELEMENTARY BIBLICAL HEBREW, I
3 credits.
Introduction to the language of the Hebrew Bible (first semester of Biblical Hebrew). Serves as basis for later forms of Classical Hebrew.
Students may not enroll in both Hebrew-Biblical 103 and 303. Enroll Info:
Junior or graduate standing
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 2020
HEBR-BIB 304 - ELEMENTARY BIBLICAL HEBREW, II
3 credits.
Second semester of Biblical Hebrew. Continuation of Hebrew-Biblical 303. Students may not enroll in both Hebrew-Biblical 104 and 304. Enroll Info: Junior or graduate standing
Requisites: None
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.
Third semester of Biblical Hebrew. Review of grammar, introduction to reading narrative texts. Enroll Info: Hebrew-Biblical 104
Requisites: None
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.
Fourth semester of Biblical Hebrew. Continuation of 323. Enroll Info:
Hebrew Biblical 323
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 2020

## HEBR-BIB/CLASSICS/JEWISH/LITTRANS/RELIG ST 332 - PROPHETS OF THE BIBLE <br> 4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English). Enroll Info: None
Requisites: 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. Enroll Info: HEBR-BIB 324
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
Last Taught: Fall 2017
HEBR-BIB/JEWISH 514 - BIBLICAL TEXTS, POETRY
3 credits.
Continuation of 513. Enroll Info: HEBR-BIB/JEWISH 513
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
Last Taught: Spring 2013
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. Enroll Info: None
Requisites: 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
HEBR-BIB 701 - ARAMAIC I
3 credits.
Grammar and readings in Biblical Aramaic (Daniel, Ezra). Enroll Info: None
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, Elephentine letters, Ahiqar, Targumim. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None

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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None

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. Enroll Info: None
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. Readings in the ancient translations. Enroll Info: Hebrew 514 or consent of instructor
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.
Continuation of 651. Enroll Info: Hebrew 751
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
HEBR-BIB 753 - WISDOM LITERATURE: PROVERBS AND QOHELET
3 credits.

Philological and literary study selections from the Hebrew text of Proverbs, Qohelet, and other works. Readings in the ancient translations. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

HEBR-BIB 754 - WISDOM LITERATURE: JOB
3 credits.
Philological and literary study of the Hebrew text of Job. Readings in the ancient translations. Enroll Info: None
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). Enroll Info: None
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.
Consent of chairperson required. Enroll Info: None
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
HEBR-BIB 951 - SEMINAR-BIBLICAL STUDIES
2 credits.
Topics vary. Enroll Info: None
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/JEWISH 954 - THE DEAD SEA SCROLLS
2 credits.
Research in the literature, religion, and society of the Qumran community. Enroll Info: 2 yrs of Biblical Hebrew Graduate standing, or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

HEBR-BIB 990 - RESEARCH AND THESIS
2-9 credits.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## HEBREW-MODERN (HEBR-MOD)

HEBR-MOD 101 - FIRST SEMESTER HEBREW
4 credits.
For students with little or no previous knowledge of Hebrew. Basic
communication skills; speaking, reading, writing modern Hebrew;
elements of grammar and syntax. Enroll Info: None
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 2020
HEBR-MOD 102 - SECOND SEMESTER HEBREW
4 credits.
Continuation of 101. Enroll Info: Hebrew Mod 101
Requisites: None
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-MOD 201 - THIRD SEMESTER HEBREW
4 credits.
Readings from modern Hebrew texts, intermediate grammar and syntax, development of oral proficiency, emphasis on class discussions. Enroll
Info: Hebrew Mod 102
Requisites: None
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-MOD 202 - FOURTH SEMESTER HEBREW
4 credits.
Continuation of 201. Enroll Info: Hebrew Mod 201
Requisites: None
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

HEBR-MOD/JEWISH 301 - INTRODUCTION TO HEBREW LITERATURE 3 credits.

Selected works for different periods and genres; class discussions in Hebrew. Enroll Info: Jewish Studies 202
Requisites: None
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 2020
HEBR-MOD/JEWISH 302 - INTRODUCTION TO HEBREW LITERATURE 3 credits.

Continuation of 301. Enroll Info: Jewish Studies 301
Requisites: None
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 2020
HEBR-MOD/JEWISH 401 - TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE I
3 credits.
Readings in Hebrew literature, class conducted in Hebrew. Enroll Info: Jewish Studies 302.
Requisites: None
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 2020

HEBR-MOD/JEWISH 402 - TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE II
3 credits.
Continuation of 401. Enroll Info: Jewish Studies 401
Requisites: None
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: Spring 2019

## 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. Enroll Info: None
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
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. Enroll Info: None
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 2020
HISTORY/ASIAN/E A STDS 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. Enroll Info: None
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
HISTORY/ASIAN/E A STDS 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. Enroll Info: None 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

HISTORY 105 - INTRODUCTION TO THE HISTORY OF AFRICA 3-4 credits.

Major historic and current problems in African life, as seen by Africans.
Enroll Info: None
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
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. Enroll Info: None
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 2020
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 21 st century. Enroll Info: None

## 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
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. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

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.). Enroll Info: None
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
HISTORY 111 - CULTURE \& SOCIETY IN THE ANCIENT MEDITERRANEAN 3-4 credits.

This course provides students with a thematic and cross-cultural introduction to the ancient Mediterranean world from prehistoric times to Late Antiquity. Students will gain a sense of chronological change and cultural diversity by looking at a series of case studies arranged around a weekly theme. These examine the connectivity and isolation of communities across the Mediterranean world, varieties of political organization and social relations, as well as economic structures. Enroll Info: None
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/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. Enroll Info: None
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 2018
HISTORY 115 - MEDIEVAL EUROPE 410-1500
4 credits.
From the later Roman Empire to the end of the Middle Ages. Enroll Info: None
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 2017

## 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. We shall 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. Enroll Info: None
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 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. Enroll Info: None
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
HISTORY 120 - EUROPE AND THE MODERN WORLD 1815 TO THE PRESENT
4 credits.
Political, economic, social, and cultural history of modern Western civilization. Enroll Info: None
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

HISTORY 123 - ENGLISH HISTORY: ENGLAND TO 1688
$3-4$ credits.
Political, economic, social, and cultural history from earliest historic times. Enroll Info: None
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 2018
HISTORY 124 - BRITISH HISTORY: 1688 TO THE PRESENT
4 credits.
Political, economic, social, and cultural history of Great Britain. Enroll Info: None
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 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? This course will explore such questions as we 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017

## 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. Enroll Info: None
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 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. Enroll Info: None
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

## 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. Enroll Info: None
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/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? In this course, we examine 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. Enroll Info: None
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
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. Enroll Info: None
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 2020

HISTORY 135 - COLLOQUIUM IN COMPARATIVE WORLD HISTORY 4 credits.

Enroll Info: None
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 2011
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. With this in mind, this course explores how sport has shaped and been shaped by major trends in American social, political, and economic history. Lectures and discussion sections will not focus on player stats or the morning edition of SportsCenter. Instead, students will engage 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. Non-sports fans are welcome and encouraged to enroll! Enroll Info: None
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 2020

## HISTORY 139 - THE MIDDLE EAST IN THE 20TH CENTURY

3-4 credits.

Partition of the Ottoman Empire; rise of independent states; French, British, United States, and Soviet involvement; the cold war; Arab-Israeli conflict. Enroll Info: Open to All Undergrads except first semester Fr
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 2020

## 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. Enroll Info: None
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. Open to all undergrads. Enroll Info: None
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 2020
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. This course follows 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. Enroll Info: None
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 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. Enroll Info: None
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 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. Enroll Info: None

## 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 2020
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. Enroll Info: None
Requisites: Sophomore standing
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 2019

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. Enroll Info: None
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: 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2017

## HISTORY/HIST SCI 171 - HISTORY OF MEDICINE IN FILM

 3-4 credits.Considers the social and cultural history of 20th and early 21 st 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. Enroll Info: None 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 2019
HISTORY 199 - DIRECTED STUDY
1-3 credits.
Enroll Info: Open to Fr So with cons inst
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 2018
HISTORY 200 - HISTORICAL STUDIES
1-4 credits.
Introduction to historical studies at the research university. Emphasis on interpretation and critical thinking. Small-group discussion and intensive writing. Topics vary. Enroll Info: None
Requisites: Sophomore standing or one class in HISTORY
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 2020

## HISTORY 201 - THE HISTORIAN'S CRAFT

3-4 credits.
Students conduct original historical research and convey the results to others. Through engagement with archival materials, undergraduates become historical detectives; they practice defining important historical questions, collecting and analyzing evidence, presenting original conclusions, and contributing to ongoing discussions. Students confer individually with and receive feedback from instructors to improve their skills of historical analysis and communication in both written and spoken formats. Requirements include at least 30 pages of writing - including drafts - and two or more formal oral presentations, each totaling at least five minutes. Upon successful completion of this course, students will be prepared to undertake historical research and writing in a variety of courses, including the HIST 600 capstone seminar. Enroll Info:

## Com A or equivalent

Requisites: Not open to students who have taken HISTORY 201
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 2020
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. Enroll Info: None
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
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. Enroll Info: Sophomore standing or one HISTORY course or one REL ST course
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: Fall 2018

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. The course 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. Enroll Info: None
Requisites: Sophomore standing or one HISTORY class or one REL ST

## class

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
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. Enroll Info: Sophomore standing or consent of instructor
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 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. Enroll Info: None
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: 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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
HISTORY 221 - EXPLORATIONS IN AMERICAN HISTORY (H)
3-4 credits.
Topics vary reflecting the interests, expertise, and innovating intention of the instructor. Enroll Info: Sophomore standing. May receive credit only once for each topic taken
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 2020
HISTORY 223 - EXPLORATIONS IN EUROPEAN HISTORY (H)
3-4 credits.
Topics vary reflecting the interests, expertise, and innovating intention of the instructor. Enroll Info: Sophomore standing. May receive credit only once for each topic taken
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: Fall 2020

HISTORY 224 - EXPLORATIONS IN EUROPEAN HISTORY (S) 3 credits.

Topics vary reflecting the interests, expertise, and innovating intention of the instructor. Enroll Info: So st. May receive credit only once for each topic taken
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 2018
HISTORY 225 - EXPLORATIONS IN THIRD WORLD HISTORY (H)
3-4 credits.
Topics vary reflecting the interests, expertise, and innovating intention of the instructor. Enroll Info: Sophomore standing. May receive credit only once for each topic taken
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: Summer 2020

## HISTORY 227 - EXPLORATIONS IN THE HISTORY OF RACE AND ETHNICITY <br> 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. Enroll Info: None
Requisites: None
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 2019
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. Enroll Info: Sophomore standing. May receive credit only once for each topic taken
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 2015

## HISTORY 229 - EXPLORATIONS IN TRANSNATIONAL/COMPARATIVE HISTORY (HUMANITIES) <br> 3 credits.

Explores topics that involve at least two continents. Topics vary reflecting the interests, expertise, and innovating intention of the instructor. Enroll Info: Soph St. May receive credit only once for each topic taken 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: Fall 2020

HISTORY/RELIG ST 230 - JUDAISM, CHRISTIANITY, AND ISLAM: BRAIDED HISTORIES
3 credits.
An examination of the braided histories of Judaism, Christianity and Islam from 2000 BCE to 2000 CE, emphasizing their theological, cultural, and political relationships. Enroll Info: None
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 2015

## 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. Enroll Info: None
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 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. Enroll Info: None
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

## 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 21 st century, including an exposure to region's contemporary literature. Enroll Info: 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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: 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 2020

## 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. This course will examine 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, we will attempt 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. Enroll Info: None
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
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. Enroll Info: None
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 2019
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. Enroll Info:

## None

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 2020
HISTORY/ASIAN/E A STDS/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. Enroll Info: None
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

## 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. Enroll Info: None
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. Enroll Info: None
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: Summer 2020
HISTORY/LEGAL ST 261 - AMERICAN LEGAL HISTORY TO 1860

## 3-4 credits.

This course surveys the development of American law down to the U.S. Civil War. After a review of the English historical background, it examines how law changed in colonial America, culminating in the framing of the U.S. Constitution. It then 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. Enroll Info: Sophomore standing
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: Fall 2020

## HISTORY/LEGAL ST 262 - AMERICAN LEGAL HISTORY, 1860 TO THE PRESENT <br> 3-4 credits.

This course 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, it examines 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 is on how law interacts with political, social, and cultural change. Enroll Info: Sophomore standing
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 2020

## HISTORY/ANTHRO/ART HIST/DS/LAND ARC 264 - DIMENSIONS OF MATERIAL CULTURE <br> 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. Enroll Info: None

## 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

## HISTORY/GNS 265 - AN INTRODUCTION TO CENTRAL ASIA: FROM THE

 SILK ROUTE TO AFGHANISTAN3 credits.
Examination of human geography, ethnicity, nomadism and pastoralism, oases cultures, religion and international politics of the silk routes of central Asia. Enroll Info: 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

## 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. Enroll Info: 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

## 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. Enroll Info: None
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

## HISTORY 269 - WAR, RACE, AND RELIGION IN EUROPE AND THE UNITED STATES, FROM THE SCRAMBLE FOR AFRICA TO TODAY 3-4 credits.

This course investigates the complex history of European and American violence and war-making through the lens of race and religion. Taking a comparative approach, we analyze 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. How did religious forces and racial claims shape these conflicts? How did these wars reinforce the modern notion of the nation-state, and strengthen both racist and anti-racist movements? Key topics in the class 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, the course will investigate new connections between Europe and the United States. Join us as we take an international look at concepts like race and nation, and try to make sense of extreme violence, war-making, and the prerequisites of peace. Enroll Info: None
Requisites: Sophomore standing or one class 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

## HISTORY 270 - EASTERN EUROPE SINCE 1900

3-4 credits
This class introduces students to the dramatic history of twentiethcentury Eastern Europe, a place where imperialism, Nazism, Communism, genocide, democracy, and capitalism all left their mark. The course revolves around three interrelated themes--war, revolution, and society-all of which allow us to place Eastern Europe within broader comparative contexts. In addition to exploring significant political, economic, and cultural changes, we'll discover how ordinary people--including workers, peasants, women, and children-experienced attempts to change the region and its people. Throughout, we will discuss how East Europeans continue to wrestle with the ghosts of their past today. Enroll Info: None 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: Fall 2017
HISTORY 271 - HISTORY STUDY ABROAD: EUROPEAN HISTORY 1-4 credits.

Topics vary reflecting the specializations, expertise, and curricula of study abroad programs. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: Preparation for and participation in a UW-approved 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. Enroll Info: So st or cons inst
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: Yes, unlimited number of completions Last Taught: Fall 2020

## HISTORY/ASIAN/ASIAN AM/E A STDS 276 - CHINESE MIGRATIONS

 SINCE 15003-4 credits.
Introduces the comparative history of Chinese migrations to the U.S. and world. Examines patterns of movement; imagined communities through cultural identity, citizenship, queerness, heritage tourism, studying abroad, and transnational adoption; as well as sites of cultural production such as food, literature, architecture, and cinema. Enroll Info: Sophomore standing or consent of instructor
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 2020

## HISTORY/AFRICAN/AFROAMER/ANTHRO/GEOG/POLI SCI/SOC 277 AFRICA: AN INTRODUCTORY SURVEY <br> 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. Enroll Info: None 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: Fall 2020
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. Enroll Info: So st
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 2019

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. Enroll Info: So st
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: 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Breadth - Humanities
Level - Intermediate
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

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. Enroll Info: None
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 2018

HISTORY 300 - HISTORY AT WORK: PROFESSIONAL SKILLS OF THE MAJOR
1-2 credits.
History at Work is intended to help history majors understand how their History degree 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 speakers from a variety of fields.

## Enroll Info: None

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 2020
HISTORY 301 - HISTORY AT WORK: HISTORY INTERNSHIP SEMINAR 1 credit.

Supplements HISTORY 300 by providing an opportunity for students who are completing an internship during the time of their enrollment (or who completed an internship in the summer and are enrolled in the fall) to discuss any issues or challenges that arose in their position. It also encourages students to identify and analyze the differences between an internship and a non-professional job, with an eye towards articulating how their History degree and the skills it confers can be valuable in professional settings. Students will share their internship experiences with their classmates through short presentations. Enroll Info: Students must be participating in an internship by the beginning of the term for which they enroll (internships completed during the summer are acceptable for fall enrollment only).
Requisites: At least 1 credit of HISTORY 300 or concurrent enrollment in 2 credits of HISTORY 300
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
Last Taught: Fall 2020

## HISTORY 302 - HISTORY OF AMERICAN THOUGHT, 1859 TO THE PRESENT <br> 3-4 credits.

Designed for students 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. Enroll Info: None
Requisites: Sophomore Standing, or one course in HISTORY or HIST SCI 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 2020

## 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. Enroll Info: So st
Requisites: None
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 2019
HISTORY 304 - UNITED STATES, 1877-1914
3-4 credits.
The rise and impact of modern industrialism, organization of labor and farmers, disappearance of the frontier, growth of American imperialism, and the resulting political, intellectual, and social changes in America. Enroll Info: Sophomore standing
Requisites: None
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 2012

HISTORY 305 - UNITED STATES 1914-1945
3-4 credits.
Political, social, economic, and cultural changes in America during World War I, the Twenties, the Age of the Great Depression, World War II. Enroll Info: So st
Requisites: None
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 2013
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. Enroll Info: So st
Requisites: None
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 2020
HISTORY 307 - A HISTORY OF ROME
3-4 credits.
Roman civilization from the monarchy through the collapse of the Roman Empire in the west. Enroll Info: So st
Requisites: None
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/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.
Enroll Info: 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 2019

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. Enroll Info: So st Requisites: None
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/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." Enroll Info: None 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/MEDIEVAL 313 - INTRODUCTION TO BYZANTINE HISTORY AND CIVILIZATION <br> 3-4 credits.

Topical consideration of the entire scope of the history of the Byzantine Empire, from the fourth to the fifteenth centuries, and selected aspects of its culture. Enroll Info: So st
Requisites: None
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 2012
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. Enroll Info: None
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/MEDIEVAL/RELIG ST 318 - MEDIEVAL SOCIAL AND INTELLECTUAL HISTORY, 1200-1450
3-4 credits.
Emphasis on social change and intellectual developments. Enroll Info: So st
Requisites: None
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 2012
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. Enroll Info:

## None

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
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. Enroll Info: So st
Requisites: None
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
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. Enroll Info: None
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 2020

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. Enroll Info: None
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

## 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. Enroll Info: Jr st or cons inst. Grads enroll concurrently in HIST SCI 623
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: Spring 2020
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. 4th credit requires extra work. Enroll Info: Jr st
Requisites: None
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/ENVIR ST 328 - ENVIRONMENTAL HISTORY OF EUROPE 3 credits.

This class 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. Enroll Info: Sophomore Standing 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: Sophomore standing
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

## 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? This is one of the questions that threads through this course on the global history of humanitarianism. Examine 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? We will explore 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. Enroll Info:

## None

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/E A STDS/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. Enroll Info: None
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 2020

## HISTORY 333 - THE RENAISSANCE

3-4 credits
Emphasis on the transition from medieval to early modern thought in Italy, 1300-1525. Enroll Info: So st
Requisites: None
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 2013

HISTORY/RELIG ST 334 - THE REFORMATION
3-4 credits
The division of Western Christendom, 1500-1650, and its impact on Europe and the world. Enroll Info: So st
Requisites: None
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 2012

## HISTORY/ASIAN 335 - THE KOREAS: KOREAN WAR TO THE 21ST CENTURY <br> 3-4 credits.

A historical examination of the Korean War and the politics and society of North Korea and South Korea. Enroll Info: None
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
HISTORY 336 - CHINESE ECONOMIC AND BUSINESS HISTORY: FROM SILK TO IPHONES

3-4 credits.

This is an intermediate-level course on Chinese economic and business history that covers both pre-modern and modern China. The approach is historical; no prior knowledge of economics is required. 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. Enroll Info: None
Requisites: Sophomore standing or one class in HISTORY, E A STDS, 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 2020

HISTORY/ASIAN/E A STDS 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. Enroll Info: None
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 2017
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. This course explores key aspects of Korea's great cultural and social transformation from the 15 th century to the 21 st century. We will delve into recent studies on gender history and on the constructed notion of "national culture." We will also analyze primary sources from different historical periods, as well as cinematic representations of Korea's past and present. Enroll Info: None
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/ASIAN/E A STDS 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. Enroll Info: None

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 2017

HISTORY/ASIAN/E A STDS 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. Enroll Info: So st
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 2020
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. Enroll Info: So st
Requisites: None
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. Enroll Info: None
Requisites: Must have sophomore standing or higher. Students that have previously taken HISTORY 427 or HISTORY 428 are not eligible to enroll for this course.
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 2011

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. Enroll Info: None
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 credits.Major topics in the history of Caribbean societies from the European conquest to the present. Emphasis on colonial rule, slavery, and the diaspora communities created by Caribbean peoples in the United States and Europe. Enroll Info: None
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 2018
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. Enroll Info: So st
Requisites: None
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 2014

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. Enroll Info: So st Requisites: None
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 350 - THE FIRST WORLD WAR AND THE SHAPING OF TWENTIETH-CENTURY EUROPE <br> 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. This course will explore such themes. Using a wide variety of contemporary sources -- memoirs, essays, poems, or cinematic representations -- we will try to situate the upheaval of 1914-1918 within the larger framework of twentieth-century European history. Enroll Info:
Sophomore standing or consent of instructor
Requisites: None
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 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". Enroll Info: So st
Requisites: None
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

HISTORY 352 - EIGHTEENTH CENTURY EUROPE
$3-4$ credits.
Political, cultural, and social transformations in eighteenth century
Europe. Enroll Info: So st
Requisites: None
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 2011
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. Enroll Info: None
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 2018
HISTORY/GEN\&WS 354 - WOMEN AND GENDER IN THE U.S. SINCE

## 1870

3-4 credits.
See 520. Enroll Info: None
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 2019

## HISTORY/CHICLA/LACIS/POLI SCI 355 - LABOR IN THE AMERICAS: US \& MEXICO IN COMPARATIVE \& HISTORICAL PERSPECTIVE <br> 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. Enroll Info: None 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 2020
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. Enroll Info: Sophomore standing
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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, the course also aims to 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?. Enroll Info: None
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. Enroll Info: So st
Requisites: None
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 2016

## 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. Enroll Info: None
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

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. Enroll Info: So st or HISTORY 123-124
Requisites: None
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/ASIAN/E A STDS 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. Enroll Info: None
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 2017

## 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. Taking a comparative and interdisciplinary approach, we 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 in the class 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, this course will investigate how people power has shaped the European state, and vice-versa, from 1922 through today. Enroll Info: None
Requisites: One HISTORY course or 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

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. Enroll Info: None
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 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. Enroll Info: None
Requisites: Sophomore standing or one course 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 2019

## HISTORY/JEWISH 374 - MODERN POLITICAL HISTORY OF THE JEWS:

 ERA OF MASS MOVEMENTS, 1870-19704 credits.
This course will focus on Jewish socialist and nationalist political movements, analyzing their origins in imperial Russia in the late 19th century and their development in the Soviet Union, Poland, Palestine/
Israel, and the U.S. in the 20th century. Enroll Info: None
Requisites: None
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 2012
HISTORY 377 - HISTORY OF AFRICA, 1500 TO 1870
3-4 credits.
Studies of Ottoman and European expansion into Africa. The slave trade and unique internal dynamics in African cultures and societies during the period 1500-1870. Enroll Info: So st
Requisites: None
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 2012

## HISTORY 378 - HISTORY OF AFRICA SINCE 1870

3-4 credits.
From the European conquest: resistance movements, African social history, the politics of independence. Emphasis on Africa south of the Sahara. Enroll Info: So st
Requisites: None
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 2011
HISTORY/RELIG ST 379 - ISLAM IN IRAN
3 credits.
History of Islam in Iran from Arab conquest in the seventh century to the Islamic Revolution in 1978-89. Enroll Info: So st
Requisites: None
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 2013
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. Enroll Info: None
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
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. Enroll Info: None
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 2020

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. Enroll Info: Jr st or cons inst
Requisites: None
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
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. Enroll Info: None Requisites: HISTORY 201, or 2 courses in HISTORY or 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 2020

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. Enroll Info: So st
Requisites: None
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 2020
HISTORY 408 - AMERICAN LABOR HISTORY: 1900-PRESENT
3-4 credits.
An examination of work, workers, and working class culture in twentieth
century America. Enroll Info: So st
Requisites: None
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 2013

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. Enroll Info: Sophomore standing
Requisites: None
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
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. Enroll Info: None 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. Enroll Info: None
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

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. Enroll Info: So st
Requisites: None
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 2018
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. Enroll Info: So st
Requisites: None
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 2019
HISTORY 419 - HISTORY OF SOVIET RUSSIA
3-4 credits.
Major political, economic and social developments in Russia since 1917.
Enroll Info: Jr st or cons inst
Requisites: None
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. Recommended that students have some knowledge of modern Russian history or of modern European cultural history. Enroll Info: So st
Requisites: None
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 2013

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. Enroll Info: None
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
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.' Enroll Info: So st 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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: Jr st or cons inst

## Requisites: None

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/LEGAL ST 426 - THE HISTORY OF PUNISHMENT
3-4 credits.
This course examines punishment across a vast range of historical traditions, examining how wrongdoing and punishment have been figured in law, literature, art and philosophy. Through the semester we will examine ancient, medieval and modern traditions. Enroll Info: Junior or Senior standing or consent of instructor
Requisites: None
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 2020

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. Enroll Info: Soph st; not open to stdts who have previously taken HISTORY 345
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## HISTORY 428 - THE AMERICAN MILITARY EXPERIENCE SINCE 1899

$3-4$ credits.
A survey of American military experience in the 20th and 21 st centuries, examining the influence of warfare on all aspects of American society. Enroll Info: Soph st; not open to students who have previously taken HISTORY 345
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## HISTORY/ENVIR ST/LEGAL ST 430 - LAW AND ENVIRONMENT:

 HISTORICAL AND CONTEMPORARY PERSPECTIVES3 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 DenmarkNorway; emphasis on the interplay between social and political forces and institutions and the area's relationship with the rest of Europe. Enroll Info: So st
Requisites: None
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 2020
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. Enroll Info: None
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
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. Enroll Info: So st
Requisites: None
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
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. Enroll Info: None
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: Fall 2013

## HISTORY/ASIAN/RELIG ST 438 - BUDDHISM AND SOCIETY IN SOUTHEAST ASIAN HISTORY

3-4 credits.
Therevada 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. Enroll Info: 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
HISTORY/RELIG ST 439 - ISLAMIC HISTORY FROM THE ORIGIN OF ISLAM TO THE OTTOMAN EMPIRE
3-4 credits.
Political action and organization in medieval Islam (ca 600-1500), with focus on selected states. Enroll Info: So st
Requisites: None
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
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, chosen to illustrate such outcomes as social revolution, authoritarian repression and electoral stalemate, vary each year. Enroll

## Info: So st

Requisites: None
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 444 - HISTORY OF EAST AFRICA
3-4 credits.
Formation of ethnic groups, state building, the development of precolonial trade institutions, and African social and political history in the colonial period. Enroll Info: So st
Requisites: None
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 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. Enroll Info: None
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 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 18 th century to the present day, students will learn about the making of modern South Asia and attempt to understand this paradox. Enroll Info: None
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 2020

## HISTORY/ENVIR ST/F\&W ECOL 452 - WORLD FOREST HISTORY

 3 credits.Examines world forest history, with attention to links between societal change and forest change. Examines how different peoples have used or abused the forest, how societies have struggled to establish policies governing forests, and how perceptions of forests have evolved. Enroll Info: None
Requisites: None
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 2012

HISTORY/ASIAN/E A STDS 454 - SAMURAI: HISTORY AND IMAGE 3-4 credits.

Japanese warriors, their ideals, and their images from the tenth century to the present. Enroll Info: None
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 2016

HISTORY/ASIAN/E A STDS 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. Enroll Info: None
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
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. Enroll Info: Jr st or cons inst
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 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. Enroll Info: 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 2017
HISTORY/LEGAL ST 459 - RULE OF LAW: PHILOSOPHICAL AND HISTORICAL MODELS
3-4 credits.
From the perspectives of history and political theory, this course examines the multiple meanings of the idea of the rule of idea, and its uses in American history. We then explore prominent critiques of the rule of law ideal. Enroll Info: A previous law-related course
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: Spring 2013

## HISTORY/ENVIR ST/GEOG 460 - AMERICAN ENVIRONMENTAL HISTORY <br> 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. Enroll Info: So st
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
HISTORY/ASIAN 463 - TOPICS IN SOUTH ASIAN HISTORY 3 credits.

Topics vary related to the History of South Asia, Eurasia, and the Indian Ocean. Enroll Info: None
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

HISTORY/ART HIST/DS 464 - DIMENSIONS OF MATERIAL CULTURE 3 credits.

Approaches to the interdisciplinary study of the material world in order to analyze broader social and cultural issues. Guest speakers explore private and public objects and spaces from historic, ethnographic, and aesthetic perspectives. Enroll Info: None
Requisites: One course 300-level or higher in ART HIST or DS
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 2012
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 firsthand historiographical research experience and training in writing for public web audiences. Enroll Info: None
Requisites: Sophomore standing or one course 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## 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 teaching students skills they can use to interpret landscape history themselves. Enroll Info: None
Requisites: Sophomore standing or one course 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2018
HISTORY 474 - EUROPEAN SOCIAL HISTORY, 1830-1914
3-4 credits.
Societal change in an age of revolution; bourgeois culture and its discontents; class, gender, religion, region, and nation; formation of political ideologies, including liberalism, conservatism, socialism, anarchism, imperialism, and racism. Enroll Info: Sophomore standing
Requisites: None
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 2014
HISTORY 475 - EUROPEAN SOCIAL HISTORY, 1914-PRESENT 3-4 credits.

State, class, gender, and culture from he world wars to the present. Democracy, communism, fascism. Emphasis on everyday life, consumption, leisure, technology, and Americanization. Enroll Info: So st
Requisites: None
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

## HISTORY/LEGAL ST 476 - MEDIEVAL LAW AND SOCIETY

3 credits.
The course is intended to introduce students to the central historical developments of law and legal institutions in the European middle ages (400-1500). Enroll Info: None
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 2020
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. We will 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. Enroll Info: None

Requisites: Sophomore standing and a 100 - or 200 -level HIST SCI or MED HIST course; LEGAL ST/HISTORY 261; SOC/LEGAL ST 131; or POLI SCI/ LEGALST 217
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
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. Enroll Info: None
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 2020
HISTORY/AMER IND 490 - AMERICAN INDIAN HISTORY
3-4 credits.
Enroll Info: Jr st or cons inst
Requisites: None
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

HISTORY 500 - READING SEMINAR IN HISTORY
3 credits.
Advanced exploration of selected topics, featuring intensive reading, writing, and small-group discussion. Topics vary. Enroll Info: Jr st cons inst
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: Fall 2020
HISTORY/LEGAL ST 502 - LAW AND COLONIALISM
3 credits.
Historical introduction to the role of law in the context of empire, with special emphasis on 19th-20th C British imperialism; explores themes of class, race and gender through fields of law including criminal, property, family, contract and labor law. Enroll Info: Previous law-related course Requisites: None
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 2013
HISTORY 503 - IRISH AND SCOTTISH MIGRATIONS
3 credits.
An examination of migrations into, out of, and between Ireland and Scotland from Roman times to the present. Particular attention paid to migrant and ethnic experiences in the United States, Canada, England,
Australia, New Zealand, as well as other destinations. Enroll Info: None
Requisites: None
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 2014

## HISTORY/HIST SCI/MED HIST 504 - SOCIETY AND HEALTH CARE IN

 AMERICAN HISTORY3 credits.
Lecture-seminar. Health care in America since the colonial period; emphasis on social developments. Enroll Info: None
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

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. Enroll Info: None
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. Enroll Info: None
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
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. Enroll Info: Previous law-related course
Requisites: None
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 514 - EUROPEAN CULTURAL HISTORY SINCE 1870 3-4 credits.

The fin de siecle and the main cultural trends of the twentieth century. Enroll Info: Sophomore standing
Requisites: None
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 2013

HISTORY/CURRIC/JEWISH 515 - HOLOCAUST: HISTORY, MEMORY AND EDUCATION
3 credits.
This course explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, students will critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms. Enroll Info: Jr st or cons inst
Requisites: None
Course Designation: Gen Ed-Communication Part B
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 2020

## HISTORY/CLASSICS/RELIG ST 517 - RELIGIONS OF THE ANCIENT

 MEDITERRANEAN3 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. Enroll Info: Sophomore Standing
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: Spring 2017
HISTORY/JEWISH 518 - ANTI-SEMITISM IN EUROPEAN CULTURE, 1700-1945
3 credits.
A critical review of major theories of anti-Simitism and a history of modern anti-Semitism. Enroll Info: Jr st
Requisites: None
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 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. Enroll Info: None
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
HISTORY 525 - THE WORLD AND THE WEST FROM 1492
$3-4$ credits.
How and why of major recurring types of relations between Westerners and other peoples of the world during five centuries of intensifying contact. Patterns considered: trading post empires (Eastern spices, Northern furs), slave plantation colonies, true empires (minute Western ruling elites), creole empires (Latin America, South Africa), settlement colonies, and informal empire (neocolonialism). Enroll Info: Jr st or cons inst
Requisites: None
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 2012
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. Enroll Info: None 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 2015

## HISTORY/HIST SCI/MED HIST 543 - DOCTORS AND DELUSIONS: MADNESS AND MEDICINE IN THE MODERN ERA <br> 3 credits.

Medical approaches to mental illness from 1750 to the present. Emphasis on how tension between biomedical and socio-environmental theories about psychopathology have marked modern psychiatry. Focus on Europe and the United States with global and comparative dimensions. Enroll Info: None
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 2011
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. Enroll Info: None
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/CLASSICS/HIST SCI/MED HIST/S\&A PHM 561 - GREEK AND
ROMAN MEDICINE AND PHARMACY
3 credits.
Greek and Roman medicine and drug lore from the Pre-Socratics to Oribasius (c. 600 B.C. - A.D. 350), including the backgrounds of ancient Egyptian and Mesopotamian medicine. Enroll Info: None
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 2015
HISTORY/HIST SCI/MED HIST/MEDIEVAL/S\&A PHM 562 - BYZANTINE MEDICINE AND PHARMACY
3 credits.
Byzantine and Islamic medicine and drug lore from Oribasius to the beginnings of the Italian Renaissance (c. 350 - c. 1400 A.D.). Enroll Info: None
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: Spring 2015

## HISTORY/HIST SCI/MED HIST 564 - DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN 3 credits.

This course 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.

## Enroll Info: None

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/LIS 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: Junior or Senior standing consent of instructor
Requisites: None
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 Honors - Accelerated Honors (!)
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

HISTORY 601 - HISTORICAL PUBLISHING PRACTICUM
3 credits.
Hands-on instruction and experience in historical publishing. Discussion of the nature of historical research and writing. Enroll Info: None
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

## HISTORY 607 - THE AMERICAN IMPACT ABROAD: THE HISTORICAL DIMENSION <br> 3 credits.

Repeatable (as topic changes) with cons inst. Analysis of diplomatic, economic, cultural, and social interaction of Americans with foreign
peoples and nations. Enroll Info: Jr st
Requisites: None
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 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. Enroll Info: None
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 2020

## HISTORY/AFROAMER 628 - HISTORY OF THE CIVIL RIGHTS MOVEMENT IN THE UNITED STATES <br> 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. Enroll Info: None
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 2020
HISTORY/ART HIST/JOURN/L IS 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. Enroll Info: None
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 2020
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.). Enroll Info: None
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: 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. Enroll Info: None
Requisites: Junior standing and C\&E SOC 140, SOC 181, C\&E SOC 210,
C\&E SOC 211, SOC 125, HISTORY 102, or HISTORY 109
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
HISTORY 680 - HONORS THESIS COLLOQUIUM
2 credits.
Colloquium for honors thesis writers. Enroll Info: Honors candidate cons inst. Stdts must register concurrently for HISTORY 681 or 682
Requisites: Declared in 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: Yes, unlimited number of completions
Last Taught: Fall 2020
HISTORY 681 - SENIOR HONORS THESIS
1-3 credits.
Enroll Info: Honors candidates cons inst. Stdts must register concurrently 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: Fall 2020
HISTORY 682 - SENIOR HONORS THESIS
1-3 credits.
Continuation of HISTORY 681. Enroll Info: Honors candidates cons inst. Stdts must register concurrently 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: Fall 2020

## HISTORY 690 - THESIS COLLOQUIUM

2 credits.
Colloquium for thesis writers. Enroll Info: Major in history cons inst. Stdts must register concurrently for HISTORY 691 or 692
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 2017
HISTORY 691 - SENIOR THESIS
1-3 credits
Research and writing on an original topic. Enroll Info: Major in history cons inst. Stdts pursuing distinction must register concurrently in Hist 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.
Continuation of HISTORY 691. Enroll Info: Major in history cons inst.
Stdts pursuing distinction must register concurrently in Hist 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.
Enroll Info: Jr or Sr st. Graded on a Cr/N basis; requires cons inst previous or conc exposure to the subject
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 699 - DIRECTED STUDY
1-4 credits.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst prev
or con exposure to the subject
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 2020

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. Lin. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Required of all graduate students in their first year. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
HISTORY 703 - HISTORY AND THEORY
3 credits.
Explorations of the role of theory in historical research and writing. Content varies. Enroll Info: None
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
HISTORY 704 - TOPICS IN CONTEMPORARY HISTORY
3 credits
This seminar studies two or more nations or defined regions through a comparison of a single theme or set of themes in their history. Enroll Info: None
Requisites: 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
HISTORY 705 - TOPICS IN GLOBAL HISTORY
3 credits.
This seminar examines the significance of a particular historical phenomenon from the perspective of its importance world-wide. Enroll Info: None
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

HISTORY 706 - TOPICS IN TRANSNATIONAL HISTORY
3 credits.
This seminar examines the significance of a particular event, phenomenon or question across national borders and in terms of the history of nation-state formation. Enroll Info: None
Requisites: 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
HISTORY 707 - PROSEMINAR IN EARLY MODERN EUROPEAN HISTORY, 1500-1789
3 credits.

## Enroll Info: None

Requisites: 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

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. Enroll Info: None
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

## 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. Enroll Info: None
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. Enroll Info: None
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 centuryand 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. Enroll Info: None
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. Enroll Info: None
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 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. Offered in alternate semesters. Enroll Info: Grad st, reading knowledge of Span or Portuguese cons inst
Requisites: 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

## HISTORY/L I S 734 - INTRODUCTION TO ARCHIVES AND RECORDS MANAGEMENT <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
HISTORY 752 - SEMINAR IN TRANSNATIONAL GENDER HISTORY 3 credits

Themes in Gender and Women's History within a transnational context. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: 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

HISTORY 755 - PROSEMINAR IN SOUTHEAST ASIAN HISTORY 1-3 credits.

Introductory seminar in modern Southeast Asian history; work mostly in English-language sources. Enroll Info: None
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

## HISTORY/ANTHRO/ART HIST/DS/LAND ARC 764 - DIMENSIONS OF MATERIAL CULTURE <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## HISTORY/ANTHRO 774 - METHODS FOR HISTORICAL RESEARCH IN NON-LITERATE SOCIETIES

3 credits.
Techniques and critical analysis applied to written, oral, archaeological, linguistic and cultural data. Stresses problems of synthesis. Exercises. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## HISTORY 795 - QUANTITATIVE METHODS FOR HISTORICAL RESEARCH

 3 credits.Types and use of quantitative techniques in historical research; introduction to basic methods, their application; discussion of kinds and sources of measurable historical data. Enroll Info: Sr Grad st cons inst Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014
HISTORY 800 - RESEARCH SEMINAR IN HISTORY
3 credits.
Research seminar designed for students in all fields of history. Seminar is structured to enable students to complete the research paper requirement for the MA. It will introduce students to the life of a professional historian, to different styles and methods of history, and give them the opportunity to present their findings in a conference-type setting. Enroll Info: None
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

HISTORY/CLASSICS 801 - SEMINAR-ANCIENT HISTORY 1-3 credits.

Special problems in Greek and Roman history studied in alternate years. Enroll Info: Grad st reading knowledge of appropriate foreign 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: Spring 2019

HISTORY/FRENCH/GERMAN/POLI SCI/SOC 804 - INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
HISTORY 805 - SEMINAR-MEDIEVAL HISTORY
1-3 credits.
Topics in intellectual history. Enroll Info: Grad st, reading knowl of Latin, French and German and cons inst
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

## HISTORY/JOURN 808 - MASS COMMUNICATION HISTORY

3 credits.
Intensive reading and discussion designed to introduce students to literature of mass communication. Enroll Info: None
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
HISTORY 822 - STUDIES IN ECONOMIC HISTORY
3 credits.
Topics vary each year. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

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. Enroll Info: Grad st, reading knowledge of Spanish or Porgutuese, cons inst
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

HISTORY 837 - SEMINAR-HISTORY OF MODERN BRITAIN AND IRELAND 1-3 credits.

Emphasis on social and political movements as well as on economic development. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
HISTORY 845 - SEMINAR-CENTRAL EUROPEAN HISTORY
1-3 credits.
Modern German history and the history of Central Europe. Enroll Info:
Grad st reading knowledge of German
Requisites: 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

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. Enroll Info: Grad st. Reading knowledge of Russian recommended but not 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 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. Enroll Info: Grad st reading knowledge of Russian or German or the east European language in which the stdt wishes to work cons inst Requisites: 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

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. Enroll Info: Intro prosem in mod E Asian hist or equiv, appropriate Chinese lang background, cons inst
Requisites: 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
HISTORY 855 - SEMINAR IN JAPANESE HISTORY
1-3 credits.
Research seminar in Japanese history. Focus varies each year. Required for M.A. and Ph.D. candidates in Japanese history, but open to students with no Japanese language background. Enroll Info: None
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/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. Enroll Info: None
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/RELIG ST 858 - SEMINAR IN PROBLEMS OF ISLAMIC HISTORY
2-3 credits.
Social and economic history of North Africa and the Middle East in Islamic and modern times. Enroll Info: Grad st knowledge of appropriate foreign 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 2011
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. Enroll Info: None
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

HISTORY 867 - SEMINAR-EUROPEAN SOCIAL \& INTELLECTUAL HISTORY
1-3 credits.
Subject matter varies every semester and alternates between the early modern and modern period. Enroll Info: None
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

## HISTORY 868 - SEMINAR IN MODERN FRENCH HISTORY

1-3 credits.
Social, political, and cultural history of France, 1800 to the present. Enroll Info: None
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
HISTORY 891 - PROSEMINAR IN MODERN EUROPEAN HISTORY
1-3 credits.
History of Europe since 1500. Enroll Info: None
Requisites: 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

## HISTORY 900 - INTRODUCTION TO HISTORY FOR U.S. HISTORIANS

3 credits.
A survey of U.S. history by period and field, designed to introduce new graduate students to U.S. history faculty members and each other.
Extensive discussion of how to plan a successful career as a historian.
Enroll Info: Open only to entering Grad stdts in U.S. history
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## HISTORY 901 - STUDIES IN AMERICAN HISTORY

1-3 credits.
Reading seminar in American history. Topics and periods of emphasis vary. Enroll Info: None
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/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
HISTORY/ED POL 906 - PROSEMINAR ON THE HISTORY OF EDUCATION
1-3 credits.

Reading in European or American educational history. Enroll Info: None
Requisites: 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

HISTORY/ED POL 907 - SEMINAR-HISTORY OF EDUCATION 1-3 credits.

Studies in European and American educational history. Enroll Info: None 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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
HISTORY/JOURN 919 - SEMINAR-HISTORY OF MASS
COMMUNICATION
3 credits.
Seminar in the history of mass communication in which students are expected to produce original research based on primary documents.
Enroll Info: None
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 2011

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015
HISTORY 929 - LABOR AND WORKING CLASS HISTORY IN THE UNITED STATES
3 credits.
This course is a reading seminar intended to introduce students to key topics, seminal works, and historiographic controversies in U.S. working class and labor history from the post-Civil War period to the present.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

HISTORY 940 - SEMINAR-AMERICAN HISTORY 1900-1945
3 credits.

## Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
HISTORY/AMER IND 941 - INDIANS AND EMPIRES
3 credits.
Examining the centuries of imperial competition in Native America, this seminar explores recent developments in early American Indian history.
Enroll Info: None
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.

Graduate seminar on 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
HISTORY 945 - SEMINAR-AMERICAN HISTORY 1929 TO THE PRESENT 1-3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
HISTORY 951 - SEMINAR-INTELLECTUAL HISTORY OF AMERICA
1-3 credits
Enroll Info: None
Requisites: Graduate/professional standing
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
Enroll Info: Cons inst and masters degree
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
HISTORY 958 - SEMINAR-AMERICAN MILITARY HISTORY
1-3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
HISTORY 965 - SEMINAR IN THE HISTORY OF THE AMERICAN WEST 1-3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## HISTORY 978 - TEACHING COLLEGE HISTORY: INTRODUCTION TO UNDERGRADUATE PEDAGOGY <br> 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, this course aims to translate passion for history and humanities education into practical skills for classroom success. We will explore how research on learning and teaching can be leveraged to maximize positive impact on student learning, create meaningful leaning experiences for all students, grade effectively, fairly, and efficiently while minimizing time commitments and frustrations. This course should lessen the burden of graduate student teaching by helping students learn how to preemptively avoid problems and enable undergraduate success. We will develop techniques for reaching all students where they are and helping them develop as historians and thinkers. Enroll Info: None
Requisites: Graduate/professional standing
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. Enroll Info: None
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 LATINAMERICAN AREA
1-3 credits.
Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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
HISTORY/AFRICAN/ANTHRO/ECON/GEOG/POLI SCI 983 INTERDEPARTMENTAL SEMINAR-AFRICAN STUDIES
3 credits.
Interdisciplinary inquiry in African society and culture. Enroll Info: None 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

HISTORY 990 - RESEARCH AND THESIS
1-9 credits.

Enroll Info: None
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 999 - INDEPENDENT WORK
1-6 credits.
Properly qualified graduate students may, by agreement with the major professor, undertake special out-of-class work, generally upon research problems, during the recesses of the University. This special work available only to graduate students who have the master's degree or equiv. Enroll Info: None
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 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? This course will explore such questions as we 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2017
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? In this course, we examine 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. Enroll Info: None
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

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. This course 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. In the first unit, we investigate 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. The second unit examines biological controversies such as the introduction of genetically modified plants into the food supply. The final unit asks how biological facts and theories have been and continue to be used as a source for understanding ourselves. Enroll Info: None
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 2020
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 21 st century. Enroll Info: None
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

## HIST SCI/HISTORY 171 - HISTORY OF MEDICINE IN FILM

3-4 credits.
Considers the social and cultural history of 20th and early 21 st 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. Enroll Info: None
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 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. Enroll Info: Open to Fr only or with cons inst
Requisites: Declared in 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: 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. Enroll Info: Open to Fr. Not open to stdts who have taken ILS 201 or HIST SCI/HISTORY 323, except by cons inst
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
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. Enroll Info: Not open to stdts who have had Hist of Sci 204. Open to Fr
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 2020

## HIST SCI 203 - SCIENCE IN THE TWENTIETH CENTURY: A HISTORICAL OVERVIEW <br> 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. Enroll Info: None
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

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. Enroll Info: None
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 2020
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.. Enroll Info: Open to Freshmen. For honors credit consent required in Hist Sci/Hist Med 284 or consent of instructor
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: Summer 2020
HIST SCI/MED HIST 218 - HISTORY OF TWENTIETH CENTURY AMERICAN MEDICINE
3 credits.
This undergraduate lecture course introduces students to the development of the modern American medical care system. Enroll Info:

## None

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

## HIST SCI 222 - TECHNOLOGY AND SOCIAL CHANGE IN HISTORY

 3 credits.Topics in the history of technology of interest to students in engineering and physical sciences. 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. Enroll Info: None
Requisites: Sophomore Standing, or one course in HISTORY or HIST SCI 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

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. Enroll Info: None
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
HIST SCI 250 - SPECIAL TOPICS IN HISTORY OF SCIENCE
(INTRODUCTORY)
3 credits.
Special topics in the history of science, medicine, and technology, aimed for students at the introductory (fresh-soph) level. Enroll Info: None
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: Summer 2020
HIST SCI/AFROAMER/MED HIST 275 - SCIENCE, MEDICINE, AND RACE: A HISTORY
3 credits.
Surveys the medical and scientific constructions of categories of race, placing the development of racial theories in a broad social and political context. The course will pay particular attention to the importance of racial science in slavery and colonialism. Enroll Info: None
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 2018

## HIST SCI 280 - HONORS SEMINAR: STUDIES IN SCIENCE,

 TECHNOLOGY, MEDICINE3 credits.
Intensive exploration of issues in the history of science. Emphasis on developing critical thinking about science through formal and informal writing. Enroll Info: Communications Requirement Part A must be satisfied. Open to non-honors stdts with cons inst. Open to Fr
Requisites: Declared in honors program
Course Designation: Gen Ed - Communication Part B
Breadth - Humanities
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 2020

HIST SCI/MED HIST 284 - PHYSICIAN IN HISTORY (HONORS) 1 credit.

Honors course for students enrolled concurrently for honors in History of Science 212. Open to non-honors students with consent of instructor. Enroll Info: Con reg for honors in Hist Sci/ Hist Med 212 or cons inst. Open to Fr
Requisites: Declared in 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: 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. Open to non-honors students with cons inst. Enroll Info: Open to Fr
Requisites: Declared in 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/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, NeoClassical, and Keynesian schools. Enroll Info: None
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 2020
HIST SCI/MEDIEVAL 322 - ANCIENT AND MEDIEVAL SCIENCE 3 credits.

Scientific ideas and institutions from the beginnings of Greek philosophy to the Renaissance. Enroll Info: Jr st or cons inst. Grads must enroll concurrently in HIST SCI 622
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: 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. Enroll Info: Jr st or cons inst. Grads enroll concurrently in HIST SCI 623
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: Spring 2020
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. 4th credit requires extra work. Enroll Info: Jr st
Requisites: None
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 325 - HISTORY OF PHYSICS: THE CLASSICAL PERIOD 3 credits.

Major themes in the development of physics in the eighteenth and nineteenth centuries. Enroll Info: Jr st
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: Fall 2011
HIST SCI/MED HIST/RELIG ST 331 - SCIENCE, MEDICINE AND RELIGION
3-4 credits.
Science, medicine and religion from antiquity to the present, with emphasis on Western civilization. Enroll Info: None
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

HIST SCI/MED HIST 333 - HISTORY OF MODERN BIOLOGY 3 credits.

Survey of major developments in biology and related sciences ca
1700-1950. Topics include morphology and embryology; evolutionary
theory, ecology, and genetics; physiology and recent experimental biology.
Enroll Info: Jr st or cons inst
Requisites: None
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 337 - HISTORY OF TECHNOLOGY
3 credits.

A survey of Western technology within its social and cultural context during the past 1000 years. Topics include technology in European expansion, the industrial revolution, and the rise of the United States as a technological superpower. Enroll Info: Jr st or cons inst. Grads must enroll concurrently in HIST SCI 637

Requisites: None
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 2014
HIST SCI 339 - TECHNOLOGY AND ITS CRITICS SINCE WORLD WAR II 3 credits.

Examines expert and popular criticism of technology from World War II to the present. Topics include atomic fallout, consumer society, Ralph Nader's critique of auto safety, environmentalism, the movement against nuclear power, critics in the counterculture, and appropriate technology. Enroll Info: Jr st or cons inst. Grad stdts must enroll concurrently in Hist Sci 639

Requisites: None
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 2013

## HIST SCI 343 - THE DARWINIAN REVOLUTION

3 credits.

Scientific, social, religious and related dimensions of the evolution hypothesis from predarwinian speculation and Darwin's own work to later support, criticism and continuing investigation. Coverage reaches into the twentieth century. Enroll Info: Jr st or cons inst
Requisites: None
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 2020

HIST SCI 350 - SPECIAL TOPICS IN THE HISTORY OF SCIENCE
2-3 credits
Enroll Info: So honors or Jr st
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: Fall 2020
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. Enroll Info: Jr st or cons inst
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: 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. Lectures and readings present 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. Enroll Info: Sophomore standing
Requisites: None
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2015

## 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. Enroll Info: Jr st or cons inst

Requisites: None
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

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. Enroll Info: None
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 2020
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? This course is designed to illustrate the various ways disease operates in America. We will examine 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. At first glance, this course outline might look like one disease after another, and on some level it is. However, the diseases are chosen to illustrate a different point about the social and cultural lives of disease in the history of the United States. Although the course moves forward chronologically, it is not meant as a narrative history of disease. Enroll Info: None
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 2020
HIST SCI/MATH 473 - HISTORY OF MATHEMATICS
3 credits.
An historical survey of the main lines of mathematical development. Enroll Info: None
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 2020

HIST SCI/HISTORY/MED HIST 504 - SOCIETY AND HEALTH CARE IN AMERICAN HISTORY
3 credits.
Lecture-seminar. Health care in America since the colonial period; emphasis on social developments. Enroll Info: None
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
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. Enroll Info: None
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. Enroll Info: None
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

 AMERICA3 credits.
Seminar. Health problems in the U.S. from the colonial period to the twentieth century; efforts made toward their solutions. Enroll Info: None
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 2017

HIST SCI 512 - GALILEO GALILEI: LIFE, WRITINGS, AND
INTERPRETATIONS
3-4 credits.
Galileo's life and writings in political and cultural context. Special attention to the theory of motion, telescopic discoveries, condemnation by the Inquisition (including primary documents), and to contrasting interpretations of his work, motivations, and contributions. Enroll Info: So honors or Jr st
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: Spring 2012

## HIST SCI/ENVIR ST/MED HIST 513 - ENVIRONMENT AND HEALTH IN

 GLOBAL PERSPECTIVE3 credits.
Explores the historical relationships between environmental change and human health from the 17 th through the 20 th century. Topics include colonialism and disease, medical geography, urban pollution and reform, workplace hazards, environmental risk, and the anti-toxics and environmental justice movements. Enroll Info: Jr st
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016
HIST SCI/GEOSCI 514 - HISTORY OF GEOLOGIC THOUGHT 3 credits.

Major concepts from earliest to modern times. Enroll Info: Sr st,
GEOSCI 100 or 101204 or cons inst
Requisites: None
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 <br> 3 credits.

The course will provide historical perspectives on current dilemmas facing black patients and health care professionals. Enroll Info: Jr or Sr st
Requisites: None
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 nonexperts 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2018

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 21 st 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. Enroll Info: None
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
HIST SCI/HISTORY/MED HIST 543 - DOCTORS AND DELUSIONS: MADNESS AND MEDICINE IN THE MODERN ERA
3 credits.
Medical approaches to mental illness from 1750 to the present. Emphasis on how tension between biomedical and socio-environmental theories about psychopathology have marked modern psychiatry. Focus on Europe and the United States with global and comparative dimensions. Enroll Info: None
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 2011

## HIST SCI/MED HIST 550 - MEDICAL TECHNOLOGIES IN HISTORICAL PERSPECTIVE

3 credits.
Focusing upon the 18th- to 21 st-century U. S. and building upon earlier European history, the course explores the ways that a range of technologies - e.g. stethoscopes, spirometers, x -rays, hospital design, pharmaceuticals, gene and cell therapies, telemedicine, etc. - have shaped medicine and invited social critique. Enroll Info: None
Requisites: Junior or 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 2015

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. Enroll Info: None
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 2019

HIST SCI/MED HIST 554 - A HISTORY OF WESTERN DISABILITY
3 credits.

Offers a wide range of arguments about the nature of disability, from prehistory to the 21 st century. Explores the history of disability in Western thought and practice and the formulation of personhood, citizenship, and social well being. Enroll Info: None
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## HIST SCI 555 - UNDERGRADUATE SEMINAR IN HISTORY OF SCIENCE

 3 credits.Introduction to research in history of science. Enroll Info: Hist of sci majors only-initial preference to Sr
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 2019

## HIST SCI/CLASSICS/HISTORY/MED HIST/S\&A PHM 561 - GREEK AND ROMAN MEDICINE AND PHARMACY <br> 3 credits. <br> Greek and Roman medicine and drug lore from the Pre-Socratics to Oribasius (c. 600 B.C. - A.D. 350), including the backgrounds of ancient Egyptian and Mesopotamian medicine. Enroll Info: None <br> Requisites: Junior standing <br> Course Designation: Breadth - Humanities <br> Level - Advanced <br> L\&S Credit - Counts as Liberal Arts and Science credit in L\&S <br> Repeatable for Credit: No <br> Last Taught: Fall 2015

## HIST SCI/HISTORY/MED HIST/MEDIEVAL/S\&A PHM 562 - BYZANTINE MEDICINE AND PHARMACY <br> 3 credits.

Byzantine and Islamic medicine and drug lore from Oribasius to the beginnings of the Italian Renaissance (c. 350 - c. 1400 A.D.). Enroll Info: None
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: Spring 2015
HIST SCI/HISTORY/MED HIST 564 - DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN 3 credits.

This course 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. Enroll Info: None
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 <br> 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. Enroll Info: None
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. Enroll Info: Jr st or cons inst
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 2014

HIST SCI 622 - STUDIES IN ANCIENT AND MEDIEVAL SCIENCE 1 credit.

Advanced readings in primary and secondary literature of the history of ancient and medieval science, with emphasis on historiographic issues.
Enroll Info: Grad st; con reg in HIST SCI/MEDIEVAL 322 or cons inst
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: Spring 2013
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. Enroll Info: Grad st; con reg in HIST SCI/ HISTORY 323 or cons inst

## 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: Spring 2020
HIST SCI 637 - STUDIES IN HISTORY OF TECHNOLOGY
1 credit.
Advanced readings in primary and secondary literature of the history of technology, with emphasis on historiographic issues. Enroll Info: Grad st; con reg in HIST SCI 337 or cons inst
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 2012
HIST SCI/MED HIST 668 - TOPICS IN HISTORY OF MEDICINE
3 credits.
Upper-level special topics course in the history of medicine. Enroll Info:
None
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 for history of science majors. Enroll Info: Open to honors majors in hist sci, cons inst required
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 2019

## HIST SCI 682 - SENIOR HONORS THESIS

3 credits.
Honors thesis for history of science majors. Continutation of 681. Enroll Info: Open to honors majors in hist sci, cons inst required
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 2020
HIST SCI 691 - SENIOR THESIS
3 credits.
Senior thesis for history of science majors. Research and writing on an original topic. Enroll Info: Open to hist sci majors, cons inst required
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 for history of science majors. Continuation of 691. Enroll Info: Open to hist sci majors, cons inst required
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.
$\mathrm{Cr} / \mathrm{N}$. Enroll Info: Jr st. Graded on a Cr/N basis; requires cons inst
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.
Enroll Info: Jr st. Graded on a lettered basis; requires cons inst
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/ENVIR ST/MED HIST 713 - STUDIES IN ENVIRONMENT AND
HEALTH
1 credit.
Advanced readings in primary and secondary literature of environment and health, with emphasis on current historiographic issues. Enroll Info:
Grad st, or con reg in Hist Med 513 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
HIST SCI/MED HIST 743 - DOCTORS AND DELUSIONS: MADNESS AND MEDICINE IN THE MODERN ERA
1 credit.
Advanced readings in primary and secondary literature of the history of psychiatry, with emphasis on historiographical issues. Enroll Info: Grad st con reg in MED HIST/HIST SCI/HISTORY 543, or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
HIST SCI 903 - SEMINAR: MEDIEVAL, RENAISSANCE, AND 17TH
CENTURY SCIENCE
3 credits.
Enroll Info: None
Requisites: 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
HIST SCI 907 - SEMINAR: HISTORY OF TECHNOLOGY
3 credits.
Research and readings on a topic of current interest in history of
technology. Enroll Info: None
Requisites: 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

HIST SCI 909 - HISTORY OF BIOLOGY AND MEDICINE
3 credits.
Enroll Info: None
Requisites: 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
HIST SCI 911 - SEMINAR-EIGHTEENTH CENTURY SCIENCE 3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
HIST SCI/MED HIST 915 - SEMINAR: SCIENCE IN AMERICA 3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2012

HIST SCI/MED HIST 919 - GRADUATE STUDIES IN MEDICAL HISTORY 3 credits.

Three seminars analyzing the scientific and social aspects of the development of modern medicine in Europe and America; one seminar exclusively on public health. Enroll Info: None
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.
Offered occasionally. Topics not treated in regular courses. Enroll Info:
None
Requisites: 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
HIST SCI 925 - SEMINAR: RESEARCH AND THESIS
1-3 credits.
Enroll Info: None
Requisites: 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.
Intended for graduate majors in History of Science and required of graduate majors in History of Science during their first two semesters.
Enroll Info: History of Science major; Grad st
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

## HIST SCI 990 - RESEARCH AND THESIS

1-3 credits.
Enroll Info: None
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
HIST SCI 999 - INDEPENDENT WORK
1-3 credits.
Enroll Info: None
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

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: BOTANY/BIOLOGY 130 or ZOOLOGY/BIOLOGY/BOTANY 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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: PL PATH/HORT 261 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: An intro botany crse or cons inst
Requisites: Sophomore standing and (BOTANY/BIOLOGY 130, 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 Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## HORT 289 - HONORS INDEPENDENT STUDY

## 1-2 credits.

Honors research work under direct guidance of a Horticulture faculty or instructional academic staff member. Enroll Info: 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. Enroll Info: 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 2020

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. Enroll Info: Includes field trips Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152, 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. Enroll Info: None
Requisites: BOTANY/BIOLOGY 130, 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 2020

## 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. Enroll Info: None
Requisites: (CHEM 103, 109, or 115 and 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: SOIL SCI/AGRONOMY/HORT 326 or graduate/professional

## standing

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2018
HORT 334 - GREENHOUSE CULTIVATION
2 credits.
Principles of selection, production, handling, use of fruits, vegetables, flowers, and foliage plants grown indoors. Enroll Info: One-day field trip required.
Requisites: BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY/BOTANY 152, AGRONOMY 100, or HORT 120
Repeatable for Credit: No
Last Taught: Spring 2020
HORT 335 - GREENHOUSE CULTIVATION LAB
1 credit.
Provide students with hands-on experience in and understanding of greenhouse cultivation. Enroll Info: The optional lab component of HORT 334 Greenhouse Cultivation.
Requisites: HORT 334 or concurrent registration
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: (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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152 or 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

4 credits.
Theoretical and practical training in plant cell and tissue culture, and plant genetic engineering. Includes overview of current techniques, biosafety and regulatory requirements, and experimental design and analysis used in fundamental and applied research on plants. Valuable hands-on training to those interested in careers in biotechnology. Enroll Info: None
Requisites: (BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY/BOTANY 152, or 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: Spring 2019
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. Enroll Info: None
Requisites: BOTANY/BIOLOGY 130 or ZOOLOGY/BIOLOGY/BOTANY 152
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 neverending 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No

## HORT/AGRONOMY/ENTOM/PL PATH/SOIL SCI 354 - DIAGNOSING AND MONITORING PEST AND NUTRIENT STATUS OF FIELD CROPS <br> 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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101,BOTANY/BIOLOGY 130,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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: BOTANY/BIOLOGY 130, 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## HORT 372 - COLLOQUIUM IN ORGANIC AGRICULTURE

1 credit.
Colloquium in which faculty, regional professionals, local organic farmers and students will present and discuss topics relevant to history, marketing, economics, production and social context of organic and sustainable agriculture. Enroll Info: None
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: Spring 2020
HORT 375 - SPECIAL TOPICS
1-4 credits.
Special topics on issues relevant to horticulture. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## HORT/AGRONOMY 376 - TROPICAL HORTICULTURAL SYSTEMS

 1 credit.Highlight the connections between tropical plants and society through a combination of readings, writing assignments, lectures, and collaborative work. Discussions 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 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. By the end of this course, the student will be able to make connections between horticulture and conservation, food security, nutrition, and global health. Enroll Info: None
Requisites: Junior standing
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: HORT/AGRONOMY 376
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: None
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 Sustain - Sustainability

## Repeatable for Credit: No

## 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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## HORT 461 - ADVANCED TURFGRASS MANAGEMENT AND PHYSIOLOGY

 3 credits.Interacting effects of environmental stresses on turfgrass physiology/ growth in relation to management practices. Discussion of new and conventional management systems. Use of biotechnology and plant breeding for improving turfgrass. Enroll Info: HORT/PL PATH 261 intro botany crse
Requisites: HORT/PL PATH 261 and (BOTANY/BIOLOGY 130 or ZOOLOGY/BIOLOGY/BOTANY 152)
Repeatable for Credit: No
Last Taught: Fall 2011

## HORT/PATH-BIO 500 - MOLECULAR BIOLOGY TECHNIQUES

3 credits.
Familiarize students with recombinant DNA technology through lectures as well as hands on exposure to methodologies used in molecular biology laboratories. Enroll Info: None
Requisites: (BIOCHEM 501, GENETICS 466, or MICROBIO 303) 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 2018
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. Enroll Info: None
Requisites: (GENETICS 466 or 467) and (BOTANY/BIOLOGY 130,
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 2020
HORT/AGRONOMY 502 - TECHNIQUES OF PLANT BREEDING
1 credit.
Lab and field techniques used in breeding and maintaining economic crops. Enroll Info: None
Requisites: (GENETICS 466 or 467) and (BOTANY/BIOLOGY 130,
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
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. Enroll Info: None
Requisites: (PHYSICS 103, 201, 207, or 247) and (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
Sustain - Sustainability
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. Enroll Info: None
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\&S Credit - Counts 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

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: (STAT 333 or 340 ) and M E/STAT 424; or HORT/F\&W ECOL/ STAT 572
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
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). Enroll Info: 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 2019

## 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. Enroll Info: None
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 Sustain - Sustainability
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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
Requisites: 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/AGRONOMY 811 - BIOMETRICAL PROCEDURES IN PLANT BREEDING
3 credits.
Use of statistical methods to facilitate improvements in quantitative traits of cultivated plants. Enroll Info: None
Requisites: (STAT/F\&W ECOL/HORT 572, GENETICS 466 or GENETICS 467) or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
HORT 875 - SPECIAL TOPICS
1-4 credits.
Special topics on issues relevant to Horticulture. Enroll Info: None
Requisites: 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. Enroll Info: None Requisites: 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/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 studentis thesis research. This seminar is coordinated by PBPG faculty on a rotating basis. Enroll Info: None 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
HORT 990 - RESEARCH
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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

## 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.
Enroll Info: None
Requisites: None
Course Designation: Ethnic St - Counts toward Ethnic Studies requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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). Enroll Info: None

## Requisites: None

Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## HDFS 299 - INDEPENDENT STUDY

1-3 credits.
Directed study projects for freshmen and sophomores as arranged with a faculty member. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2006

## HDFS 362 - DEVELOPMENT OF THE YOUNG CHILD

3 credits.
This course provides a basic foundation for understanding development from conception through middle childhood. Content includes theoretical foundations, research findings, and practical applications. Enroll Info: None
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 2020
HDFS 363 - DEVELOPMENT FROM ADOLESCENCE TO OLD AGE 3 credits.

This course provides a basic foundation for understanding development from adolescence through old age. Content includes theoretical foundations, research findings, and practical applications. Enroll Info: None
Requisites: Sophomore standing
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 2020

## HDFS 425 - RESEARCH METHODS IN HUMAN DEVELOPMENT AND FAMILY STUDIES <br> 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. Enroll Info: None Requisites: HDFS 362, ED PSYCH 320, PSYCH 460, or HDFS 363 (or PSYCH 560 prior to Fall 2017)
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: HDFS 362, ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
HDFS 471 - PARENT - CHILD RELATIONS
3 credits.
Parents' interaction with their children, programs for parents, and parents' interactions with other institutions. Enroll Info: None
Requisites: HDFS 362, ED PSYCH 320, PSYCH 460, or HDFS 363 (or
PSYCH 560 prior to Fall 2017)
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Ethnic St - Counts toward Ethnic Studies requirement
Repeatable for Credit: No
Last Taught: Fall 2020

HDFS 478 - DEVELOPMENT OF BLACK CHILDREN AND THEIR FAMILIES: RESEARCH AND POLICY
3 credits.
Developmental and social change issues related to Black American children and their families. Race-related socialization of children, early development in rural and urban Black families, exploration of theoretical paradigms, as well as the impact of social change on empirical research and theoretical perspectives. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Ethnic St - Counts toward Ethnic Studies requirement
Repeatable for Credit: No
Last Taught: Fall 2012
HDFS 501 - SPECIAL TOPICS
1-3 credits.
Specialized subject matter of current interest to undergraduate students. Enroll Info: Requisite varies by topic
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: Sophomore standing
Repeatable for Credit: No
Last Taught: Fall 2020

HDFS/AFROAMER 521 - AFRICAN AMERICAN FAMILIES 3 credits.

Historical background; variations in contemporary family patterns; courtship and marriage, reproduction, and socialization stresses; "culture of poverty" theories; sources of stability and change. Enroll Info: None
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
Last Taught: Summer 2011
HDFS/AMER IND 522 - AMERICAN INDIAN FAMILIES
3 credits.
Interdisciplinary examination of American Indian families in historical and contemporary contexts. Emphasizes the changing experience and structure of Native families in response to changing political, economic, social, and cultural pressures and policies over the past 200 years and contemporary challenges. Enroll Info: None
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
Last Taught: Spring 2014
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. Enroll

## Info: None

Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: JOURN 202, COM ARTS 325, HDFS 362, 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 2020

## 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. Enroll Info: None
Requisites: HDFS 362, ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
HDFS 662 - ADVANCED STUDY OF THE YOUNG CHILD
3 credits.
Research literature and current theories; topics of individual interest. Enroll Info: None
Requisites: HDFS 362, ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)
Repeatable for Credit: No
Last Taught: Spring 2013

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. Enroll Info: None
Requisites: HDFS 362, 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: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019
HDFS 690 - SENIOR THESIS
2 credits.
Individual study for seniors completing theses as arranged with a faculty member. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## HDFS 699 - INDEPENDENT STUDY

1-6 credits.
Directed study projects for juniors and seniors as arranged with a faculty member. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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
HDFS/COM ARTS 817 - COUPLE RELATIONSHIPS: THEORY, RESEARCH, AND APPLICATION
3 credits.
This course will review current research on the nature, dynamics, and developmental course of couple relationships and explore the implications of this scientific knowledge for prevention/intervention programs and policy. Contemporary theories and empirical research will be examined. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
HDFS 842 - PARENT-CHILD RELATIONS ACROSS THE LIFE COURSE
3 credits.
Parent-child relations as a dynamic reciprocal process from an interdisciplinary and multicultural perspective. Historical and contemporary views on parenthood across the life course will be covered in the context of traditional and nontraditional family forms. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## HDFS/ED PSYCH/NURSING/SOC WORK 881 - CAPSTONE SEMINAR IN PREVENTION SCIENCE <br> 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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

HDFS 990 - RESEARCH AND THESIS
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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
HDFS 999 - INDEPENDENT STUDY
1-3 credits.
Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## 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. Enroll Info: None Requisites: Graduate/professional standing or (PHYSICS 202 or 208 and ZOOLOGY/BIOLOGY/BOTANY 152 or 153)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## H ONCOL/B M E/MED PHYS/PHYSICS 501 - RADIATION PHYSICS AND DOSIMETRY <br> 3 credits.

Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry. Enroll Info: None
Requisites: MATH 234 and (PHYSICS 241 or 249) 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
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
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 2020
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. Enroll Info: None 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

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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

## H ONCOL 990 - RESEARCH IN HUMAN CANCER BIOLOGY

 1-12 credits.Graduate thesis research. Enroll Info: None
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

## 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. Enroll Info: None Requisites: Sophomore standing
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## I SY E 312 - DATA MANAGEMENT AND ANALYSIS FOR INDUSTRIAL ENGINEERS <br> 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). Enroll Info: None Requisites: STAT 311, 312, or member of Engineering Guest Students Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: (MATH 217, 221, or 275 or concurrent registration), graduate/ professional standing, or member of Engineering guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or STAT/MATH 431 or concurrent enrollment), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## I SY E 320 - SIMULATION AND PROBABILISTIC MODELING

 3 creditsAnalysis 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. Enroll Info: None
Requisites: (STAT/MATH 310 or STAT 312 or concurrent enrollment) and (MATH 320, 340, 341 or 375 or concurrent enrollment), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Concurrent enrollment in I SY E 320
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 Enroll Info: None
Requisites: (MATH 222 or 276) and (MATH 340, 341 or 375 ), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## SY E/PSYCH 349 - INTRODUCTION TO HUMAN FACTORS

 3 creditsConveys 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. Enroll Info: None
Requisites: (MATH/STAT 309, STAT 311, 324, 371, PSYCH 210, C\&E SOC
360, GEN BUS 303, 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: Fall 2020
I SY E 350 - INDUSTRIAL ENGINEERING DESIGN I
3 credits.
ntroduction 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. Enroll Info: None
Requisites: Declared in Industrial Engineering, (COMP SCI 200, 220, 300,
301 or 302), (MATH/STAT 309, STAT 311, 224, 324, or MATH/STAT 431) and I SY E 315

Repeatable for Credit: No
Last Taught: Fall 2020
I SY E 389 - HONORS IN RESEARCH
1-3 credits.

Undergraduate honors research projects supervised by faculty members. Enroll Info: None
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. Enroll Info: None Requisites: (STAT 311, 324, MATH/STAT 309, or 431), graduate/ professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: I SY E 315 or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None Requisites: Senior standing only, I SY E $313,320,323,350$, and PSYCH/ ISYE 349
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No

## I SY 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. Enroll Info: None
Requisites: I SY E 320, 349, and INTEREGR 397 (formerly E P D 397)
Repeatable for Credit: No
Last Taught: Spring 2015
I SY E 489 - HONORS IN RESEARCH
1-3 credits.
Undergraduate honors research projects supervised by faculty members. Enroll Info: None
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

## I SY 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. Enroll Info: None Requisites: I SY E 315, (I SY E 323 or EC 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 2020

## I SY 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or 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 2020

## I SY E/M E 513 - ANALYSIS OF CAPITAL INVESTMENTS

3 credits.
A second course in quantitative methods for analyzing capital investments in technological environments, both public and private. Replacement models; comparison of alternative investment models; risk analysis; case studies. Enroll Info: None
Requisites: I SY E 313, (I SY E 323 or E C E/COMP SCI/I SY E 524) and (STAT/MATH 309, STAT 311, STAT 224, STAT 324 or 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 2012

I SY 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. Enroll Info: None
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 2020

## I SY 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, or 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: Summer 2020

## SY 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, Markow (decision) processes, and Monte Carlo simulations with examples from the current medical literature. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, or STAT/MATH 431) and (I SY E 323 or 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 2020
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". Enroll Info: None 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 2019
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. Enroll Info: None
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: Spring 2020

## 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. Enroll Info: None
Requisites: (COMP SCI 200, 220, 300, 301, 302, or 310) 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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: STAT/COMP SCI/I SY E/MATH 525 and (COMP SCI 200, 220, $300,301,302$, or 310 ) 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

## I SY 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. Enroll Info: None
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 2020

I SY 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. Enroll Info: None
Requisites: I SY E/PSYCH 349 and INTEREGR 397 (formerly EP 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

## I SY 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. Enroll Info: None
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: Spring 2020
I SY 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. Enroll Info: None
Requisites: 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 2020

## I SY E/COMP SCI/M E 558 - INTRODUCTION TO COMPUTATIONAL GEOMETRY <br> 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. Enroll Info: None
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

## I SY E/MED PHYS 559 - PATIENT SAFETY AND ERROR REDUCTION IN HEALTHCARE <br> 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. Enroll Info: None
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
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. Enroll Info: None
Requisites: 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 2020

## I SY E/N E 574 - METHODS FOR PROBABILISTIC RISK ANALYSIS OF NUCLEAR POWER PLANTS <br> 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or 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 2018

## 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. Enroll Info: None
Requisites: (STAT/MATH 310 or 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 2020

I SYE 601 - SPECIAL TOPICS IN INDUSTRIAL ENGINEERING 1-3 credits.

In various areas. Sample topics: "Simulation" and "Systems Design". Enroll Info: None
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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012

## 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
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 (loT), supply chain, etc. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
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, computeraided process planning, NC programming, and CAM integration. Course provides experience with CAM software and NC machines. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020

## I SY E 612 - INFORMATION SENSING AND ANALYSIS FOR <br> MANUFACTURING PROCESSES <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: I SY E 315, 320, and I SYE 323 and (STAT/MATH 310, STAT 312 or 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 2020

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. Enroll Info: None
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 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. Enroll Info:

## None

Requisites: (COMP SCI 200, 220, 300, 301, or 302) and (STAT 224, 312, 324 , or 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 2020

## 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. Enroll Info: None
Requisites: (STAT/MATH 309, 311, or 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: Fall 2020

## I SY E/MATH/OTM/STAT 632 - INTRODUCTION TO STOCHASTIC PROCESSES <br> 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. Enroll Info: None
Requisites: (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: Fall 2020

## I SY E/MATH/OTM 633 - QUEUING THEORY AND STOCHASTIC MODELING <br> 3 credits.

Reliability theory; coherent systems and reliability bounds. Markovian queues and Jackson networks. Steady-state behavior of general service time queues. Priority queues. Approximation methods and algorithms for complex queues. Simulation. Dynamic programming; applications to inventory and queueing. Enroll Info: None
Requisites: STAT/I SY E/MATH/OTM 632
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 2010

## 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. Enroll Info: None
Requisites: (MATH 320, 340, 341, or 375) and (COMP SCI 200, 202, 300,301 , or 302) 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
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (I SY E 624 or STAT/I SY E/MATH/OTM 632) and
(COMP SCI 200, 220, 300, 301, 302, or 400), 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

## I SY 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. Enroll Info: None
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 2020

## I SY E/PSYCH 652 - SOCIOTECHNICAL SYSTEMS

3 credits.
Sociotechnical systems theory with applications to the design of organizations and jobs. Open systems and organizational environments. Analysis of the technical and social systems and techniques for "whole" system consideration. Organizational design strategy. Field site analyses by student teams. Enroll Info: None
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 2011

## I SY 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. Enroll Info: None
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 2020
I SY 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. Enroll Info: None
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 2020
I SY E/INFO SYS/OTM 671 - E-BUSINESS: TECHNOLOGIES, STRATEGIES AND APPLICATIONS
3 credits.
Overview of core concepts of e-commerce and e-business technologies, strategies and applications. Covers business-to-consumer, business-tobusiness and intra-business models by using real-world examples and cases from various industries. Enroll Info: None
Requisites: Senior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014

## I SY E 699 - ADVANCED INDEPENDENT STUDY

1-5 credits.
Under faculty supervision. Enroll Info: None
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 2020

## I SY 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. Enroll Info: None
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

## I SY 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## I SY E/C\&E SOC/N E/SOC 708 - SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS <br> 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 ) Enroll Info: None 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/MATH/STAT 726 - NONLINEAR OPTIMIZATION I 3 credits.

Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasiNewton 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. Enroll Info: 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: Fall 2020

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). Enroll Info: None
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. Enroll Info: None
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/M H R 729 - BEHAVIORAL ANALYSIS OF MANAGEMENT DECISION MAKING <br> 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. Enroll Info: Knowledge of statistics strongly encouraged such as STAT 301.
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

I SY 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. Enroll Info: None
Requisites: STAT/COMP SCI/I SY E/MATH 726
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
I SY E 790 - MASTER'S RESEARCH AND THESIS
1-9 credits.
Directed Master's-level research projects as arranged with instructor. Enroll Info: None
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
I SY E 816 - SPECIAL TOPICS IN SYSTEMS DESIGN
1-3 credits.
Subjects vary. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

I SY E 823 - SPECIAL TOPICS IN OPERATIONS RESEARCH
1-3 credits.
Subjects vary. Enroll Info: None
Requisites: 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
I SY E/PSYCH 854 - SPECIAL TOPICS IN ORGANIZATION DESIGN
1-3 credits.
Enroll Info: None
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

I SY E/PSYCH 859 - SPECIAL TOPICS IN HUMAN FACTORS ENGINEERING
1-3 credits.
Enroll Info: None
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

## I SY 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. Enroll Info: None
Requisites: SOC/POP HLTH 797 and POP HLTH/B M I 552
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
I SY E 890 - PRE-DISSERTATOR'S RESEARCH
1-9 credits.
Directed PhD-level research projects as arranged with faculty advisor. Enroll Info: None
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
I SY E 961 - GRADUATE SEMINAR IN INDUSTRIAL ENGINEERING
1-3 credits.
Topics vary. Enroll Info: None
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
I SY E 990 - RESEARCH AND THESIS
1-6 credits.
Directed PhD-level research projects as arranged with faculty advisor.
Enroll Info: None
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 999 - ADVANCED INDEPENDENT STUDY

1-6 credits.
Under faculty supervision. Enroll Info: None
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

## INFORMATION SYSTEMS (INFO SYS)

INFO SYS 365 - CONTEMPORARY TOPICS
1-3 credits.
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## INFO SYS 371 - TECHNOLOGY OF COMPUTER-BASED BUSINESS

 SYSTEMS3 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. Enroll Info: None
Requisites: COMP SCI 301 or 220
Repeatable for Credit: No
Last Taught: Fall 2019
INFO SYS 422 - COMPUTER-BASED DATA MANAGEMENT 3 credits.

Students learn how to analyze information requirements and data flows, design and build effective database systems, manipulate information in a database environment, and build database-driven applications to support management decision making. Focus on data modeling, relational databases, and database technologies. Enroll Info: None
Requisites: INFO SYS 371
Repeatable for Credit: No
Last Taught: Fall 2020

## INFO SYS 424 - ANALYSIS AND DESIGN OF COMPUTER-BASED SYSTEMS <br> 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. Enroll Info: None
Requisites: INFO SYS 422
Repeatable for Credit: No
Last Taught: Spring 2020

INFO SYS/I SY E/OTM 671 - E-BUSINESS: TECHNOLOGIES, STRATEGIES AND APPLICATIONS
3 credits.
Overview of core concepts of e-commerce and e-business technologies, strategies and applications. Covers business-to-consumer, business-tobusiness and intra-business models by using real-world examples and cases from various industries. Enroll Info: None
Requisites: Senior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
INFO SYS/I SY 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. Enroll Info: None
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. Enroll Info: None
Requisites: INFO SYS/I SY 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018

## INTEGRATED ARTS (INTEGART)

INTEGART 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. Enroll Info: None
Requisites: Member of The Studio: Creative Arts Community Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Member of The Studio: Creative Arts Community
Repeatable for Credit: No
Last Taught: Spring 2020
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 for information on specific residencies. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020
INTEGART 312 - INTERDISCIPLINARY ARTIST IN RESIDENCE LECTURE $1-3$ credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: see 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. Enroll Info: None

## Requisites: None

Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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 for information on specific residencies. Enroll Info: None
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
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 for information on specific residencies. Enroll Info: None
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. Enroll Info: None
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 HR 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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## INTEGART/M HR 636 - ENTREPRENEURSHIP IN ARTS \& CULTURAL ORGANIZATIONS <br> 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020

## INTEGRATED LIBERAL STUDIES (ILS)

## ILS/ENVIR ST 126 - PRINCIPLES OF ENVIRONMENTAL SCIENCE

 4 credits.This course relates principles of environmental science to our daily activities, with an eye to sustainability, conservation, and systems thinking. It 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ILS 138 - CRC FIRST-YEAR SEMINAR: FOUNDATIONS OF A LIBERAL ARTS EDUCATION <br> 1 credit.

Students explore stereotypes of, and update their conceptions of a "liberal arts education" and its value in today's world. Students attend various events around campus and within CRC, and discover the recourses of the University while developing community with others. Enroll Info: Must be a resident of Chadbourne Residential College. Open to Fr
Requisites: Reserved Class Section for residents of Chadbourne Residential College (Barnard Hall or Chadbourne Hall).
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## ILS 139 - CRC SPECIAL SEMINAR: TOPICS IN THE LIBERAL ARTS

 1-2 credits.A seminar on a special topic in the liberal arts for students living in the Chadbourne Residential College. Emphasis on group interaction, interpretation, and critical thinking. Topics vary. Enroll Info: None 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

## ILS 153 - WAYS OF KNOWING IN THE SCIENCES

4 credits.
Introduction to 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. Enroll Info: None

## 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

## ILS 157 - BRADLEY ROUNDTABLE SEMINAR

1 credit.
The Bradley roundtable seminar addresses various topics of interest to the residents of the Bradley Learning Community. Enroll Info: Open to Fr. Students must be residents of the Bradley Learning Community
Requisites: Reserved Class Section for residents of Bradley Learning Community.
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 2020

## ILS 198 - DIRECTED STUDY

1-3 credits.
Enroll Info: Graded on a Cr/N basis; requires cons inst and con reg in two ILS courses
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.
Enroll Info: Graded on a lettered basis; requires cons inst con reg in 2 ILS

## courses. Open to Fr

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.
The three modes of argument and expression: verbal, visual, numerical. Critical thinking about how these modes are structured and used. Practice in, and interpretation of, the three modes. Enroll Info: None
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: Fall 2020

## 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. Cannot be taken by students who have taken History of Science 201 or 403. Enroll Info: None

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: Fall 2020

## 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. Cannot be taken by students who have taken History of Science 202 or 404. Enroll Info: None

## 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 2020
ILS 203 - WESTERN CULTURE: LITERATURE AND THE ARTS I
3 credits.
The development of literature and the arts in the ancient and medieval world: Akhnaton's Egypt, Homer's Troy, Euripides' Athens, Virgil's Rome, Dante's Florence. Literature and art in the context of society and ideas. Enroll Info: None
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

## 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: such figures as Shakespeare and Michelangelo through T.S. Eliot and Picasso. Literature and art in the context of society and ideas. Sections of this course offered for 3 credits do not count for Comm B; only sections offered for 4 credits may carry the Comm B section-level designation. Students are strongly encouraged to complete Comm A before enrolling in a Comm B section. Enroll Info: None
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 2020

## ILS 205 - WESTERN CULTURE: POLITICAL, ECONOMIC, AND SOCIAL THOUGHT I <br> 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.
Enroll Info: None
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

## ILS 206 - WESTERN CULTURE: POLITICAL, ECONOMIC, AND SOCIAL

 THOUGHT II3 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. Enroll Info: None
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 2020

## ILS/RELIG ST 234 - GENRES OF WESTERN RELIGIOUS WRITING

 3 credits.Writing intensive course based on the conventions in which Western writers have expressed religious ideas. Readings from Jewish, Christian, and other spiritualities. Enroll Info: Successful completion of or exemption from Com A requirement. Open to Fr
Requisites: None
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 2020

## ILS 251 - CONTEMPORARY PHYSICAL SCIENCES

3 credits.
Twentieth century physical theory and its application in science and technology. Relativity and the quantum theory; modern cosmology and astrophysics; the quantum basis of chemistry and molecular biology; nuclear physics and nuclear power technology; lasers. Philosophical problems connected with these theories are addressed. Enroll Info:
ILS 202 or HIST SCI 201-202 or cons inst
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: Spring 2018

## ILS 252 - CONTEMPORARY LIFE SCIENCES

3 credits.
A systems oriented approach to the interrelation of plants and humans in their evolution and cultural development; a historical geographic perspective concluding with a consideration of ecosystems in twentieth century America. Enroll Info: None
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 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. Enroll Info: None
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. Enroll Info: Open to Fr. ILS crse
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 2020

## ILS 271 - PRE-COPERNICAN ASTRONOMY AND COSMOLOGY IN CROSSCULTURAL PERSPECTIVE <br> 3 credits.

Astronomy and cosmology, from the cultures of ancient Egypt, Mesopotamia, Greece, India, China and Mesoamerica, through the Arabic and Latin Middle Ages, to Copernicus. Attention to cross-cultural transmission and appropriation of techniques and data; comparisons and contrasts among methods, purposes, and organizing metaphors. Enroll Info: ILS 201 or 202 or 251 or cons inst
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: Spring 2013

## ILS 275 - SPECIAL TOPICS IN INTEGRATED LIBERAL STUDIES

 3 credits.Interdisciplinary themes and issues from the ILS program. Topics are footnoted in timetable. Enroll Info: None
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.
Enroll Info: Jr st. Graded on a Cr/N basis; requires cons inst
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
Enroll Info: Jr st. Graded on a lettered basis; requires cons inst
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 2018

## ILS 338 - PEER MONTORING FOR FIRST-YEAR LIBERAL EDUCATION SEMINAR <br> 2 credits.

A mentoring and supervision class for 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. Enroll Info: None
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: Fall 2019

## ILS 357 - PEER MENTOR SEMINAR

2 credits.
This course is designed to help improve leadership and facilitation skills for the co-facilitators of the Bradley roundtable. Enroll Info: Students must be sophs former residents of the Bradley Learning Community 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 2020

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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020

ILS 372 - INTERDISCIPLINARY STUDIES IN THE SOCIAL SCIENCES 3 credits.

Interdisciplinary analysis of selected topics in the social sciences. Enroll Info: None
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 2020

## ILS 400 - CAPSTONE INTEGRATION SEMINAR

3 credits.
Required capstone seminar for juniors and seniors seeking ILS certification. Enroll Info: Jr or Sr st and seeking ILS certificate 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 2020

## ILS 490 - RESEARCH IN INTEGRATED LIBERAL STUDIES

2-3 credits.

This course provides opportunities for students to pursue research in integrated liberal studies. Enroll Info: At least 2 prev crses 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: Fall 2020
ILS 681 - UNDERGRADUATE HONORS THESIS
3 credits.

Enroll Info: Jr or Sr st cons inst
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.
Continuation of 681. Enroll Info: Jr or Sr st cons inst
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.
Enroll Info: Jr or Sr st cons inst
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.

Continuation of 691. Enroll Info: Jr or Sr st cons inst
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. Enroll Info: None
Requisites: First year 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 2020
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. Enroll Info: None
Requisites: Member of BioHouse Residential Learning Community
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 offcampus experiences are included. Service opportunities include STEM outreach, sustainability, and public health. Involves approximately 1 hour per week of public service. Enroll Info: None
Requisites: First Year Students only
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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 multidisciplinary 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. Enroll Info: None
Requisites: INTEGSCI 240
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: None
Requisites: INTEGSCI 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: Fall 2020
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. Enroll Info: Requisites vary by topic
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## INTEGSCI 675 - SPECIAL TOPICS

1-3 credits.
This course examines various special topics in science or science education. See Class Notes for additional information. Enroll Info: None Requisites: 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.

## Enroll Info: None

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 2018

## INTEGSCI 740 - COMMUNITY RELATIONSHIPS AND MATERIALS DEVELOPMENT IN STEM PUBLIC SERVICE <br> 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. Enroll Info: None
Requisites: INTEGSCI 640
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: INTEGSCI 650
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020

## 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. Enroll Info: None Requisites: INTEGSCI 740
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## INTEGSCI 850 - MENTORED PRACTICUM IN COLLEGE SCIENCE TEACHING <br> 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. Enroll Info: None

## Requisites: INTEGSCI 750

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## INTERDISCIPLINARY COURSES (C A LS) (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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No

## INTER-AG 140 - CALS QUICKSTART: FOUNDATIONS

1 credit.
Gain exposure to 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
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.
Sophomores are exposed to a variety of scholarly topics on subjects dealing with medicine and society by campus-wide faculty. Discussions led by faculty who are primary care practitioners. Students are encouraged to explore the possibility of a research experience in their degree program. Enroll Info: Open to Sophomores only
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 2019

## INTER-AG 155 - ISSUES IN AGRICULTURE, ENVIRONMENT, AND LIFE SCIENCES <br> 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; help students develop academic skills and explore majors and careers. Enroll Info: Open to Fr
Requisites: First year freshman and declared in a College of Agriculture and Life Sciences program
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 in this national and the world and will help students identify and explore international interests in an academic major and a career. Enroll Info: Fr or So st, or cons of instr
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2017
INTER-AG 175 - WISE SEMINAR
1 credit.
Weekly seminar/discussion for the Women in Science and Engineering (WISE) learning community. Speakers drawn from all fields of math, science, and engineering on campus. Students meet to learn about research on campus and to discuss the impact of research in their daily lives. Enroll Info: Cons inst. Preference given to residents of the WISE learning community. Open to Fr
Requisites: Reserved Class Section for residents of Women in Science and Engineering in Waters Hall
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: Fall 2020

INTER-AG/INTER-LS 250 - UNDERGRADUATE RESEARCH EXPERIENCE 1-3 credits.

Participation in research or creative endeavor led by faculty or instructional staff and in undergraduate Research Scholars Program. This course may also include participation in research discussion groups, critiques of readings, and preparation of written or oral reports. Enroll Info: Freshman or Sophomore standing, admission to the Undergraduate Research Scholars Program, and consent of 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: Fall 2020

## INTER-AG 288 - INTRODUCTORY CALS HONORS SEMINAR

## 1 credit.

Students will 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. Enroll Info: None
Requisites: Declared in CALS honors in the major or 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 2020

## INTER-AG/A A E/AGRONOMY/NUTR SCI 350 - WORLD HUNGER AND MALNUTRITION <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
INTER-AG 375 - SPECIAL TOPICS
1-4 credits.
Subjects of current interest to undergraduates. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2019

## INTER-AG 388 - CALS HONORS INTERDISCIPLINARY JUNIOR SEMINAR

 1 credit.Basic elements of experimental design and conduct in biological sciences, social sciences, natural resources, animal sciences and plant sciences are explored in a seminar format. This course is required for all honors students enrolled in the College of Agricultural and Life Sciences. Enroll Info: None
Requisites: Declared in honors program
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## INTER-AG/NUTR SCI 421 - GLOBAL HEALTH FIELD EXPERIENCE

 1-4 credits.Addresses a broad range of health topics including nutrition, primary health care, water and sanitation, climate change, sustainable agriculture, and economic development. These field experiences take place in sites around the world including locations in Africa, Asia, Latin America, Europe, and the United Sates. Engaged learning will include participation in applied public health activities and service learning projects with communities and partner organizations. Students will gain knowledge about health and disease and explore interdisciplinary approaches to health. Field experiences are designed to meet the requirement for the Undergraduate Certificate in Global Health. Enroll Info: Students who are not planning to complete the Certificate in Global Health may enroll as space permits.
Requisites: Consent of instructor
Course Designation: Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## INTER-AG/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. Enroll Info: None 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in CALS College Honors and INTER-AG 388
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2020

## INTER-AG 681 - SENIOR HONORS THESIS

2-4 credits.
Individual study for seniors completing theses for CALS honors degrees guided by a faculty member. Enroll Info: Requires consent of supervising instructor and enrollment in CALS Honors Program.
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2020

## INTER-AG 682 - SENIOR HONORS THESIS

2-4 credits.
Individual study for seniors completing theses for CALS honors degrees guided by a faculty member. Requires consent of supervising instructor and enrollment in CALS Honors Program. Continuation of 681. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2020
INTER-AG 875 - SPECIAL TOPICS
2-3 credits.
Subjects of current interest to graduates. Enroll Info: None
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 2012

## INTERDISCIPLINARY COURSES (ENGINEERING) (INTEREGR)

INTEREGR 101 - CONTEMPORARY ISSUES IN THE ENGINEERING PROFESSION
2 credits.
A survey of the engineering profession's contemporary role in society. Emphasis on the engineer's responsibility to society, including concerns for business principles, safety, ethics, and the environment; the role of engineers in achieving economic stability, growth, and improving the human condition. Enroll Info: None
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 2012

## INTEREGR 102 - INTRODUCTION TO SOCIETY'S ENGINEERING GRAND CHALLENGES <br> 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2016
INTEREGR 103 - CORE COMPETENCIES FOR ENGINEERING LEADERS 2 credits.

Leadership is a core aspect of successful engineers, but it is rarely part of a formal curriculum. The course provides a solid foundation of leadership theory and practice to help future engineering professionals to be more effective in their technical work. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2018

## INTEREGR 111 - INTRODUCTION TO THE ENGINEERING DESIGN PROCESS AND PROFESSION <br> 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. Enroll Info: None
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. Enroll Info:

## None

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
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, coops), major exploration, fabrication equipment and techniques, and oral and written communication. Enroll Info: None

Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## INTEREGR 200 - CAREER ORIENTATION

1 credit.

Career planning; consideration of types of work in engineering; interviewing procedures and effective use of placement services; opportunities, division of work, and requirement for engineers in many fields. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2014

## INTEREGR 301 - ENGINEERING AND BIOLOGY: TECHNOLOGICAL

 SYMBIOSIS1-4 credits.

Combining engineering with biology can result in fascinating new technologies. This course explores 3 topics at the very forefront of bioengineering innovation as well as the social, political, and ethical issues that can affect realization. Enroll Info: None
Requisites: M E 306, E M A 303, BSE 249, E C E 230, B M E/CBE 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 <br> 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 decisionmaking strategies, multidisciplinary communication skills, research strategies, collaborative work; oral presentations. Enroll Info: None
Requisites: Satisfied Communications A requirement and junior or senior standing only
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: INTEREGR 397, E P D 397, or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

INTEREGR 601 - TOPICS IN INTERDISCIPLINARY ENGINEERING
1-3 credits.

Interdisciplinary topics of special interest to undergrad and grad students in engineering. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: INTER-HE 940
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## INTERDISCIPLINARY COURSES (L \& S) (INTER-LS)

INTER-LS 101 - FIRST-YEAR SEMINAR IN THE BIOLOGICAL SCIENCES 3 credits.

Interdisciplinary course for first-year students. Topic will vary with instructor and will be announced in the Timetable. Enrollment limited.
Enroll Info: None
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 2020

INTER-LS 102 - FIRST-YEAR SEMINAR IN THE HUMANITIES
3 credits.
Interdisciplinary course for first-year students. Topic will vary with instructor and will be announced in the Timetable. Enrollment limited. Enroll Info: None
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 2019

INTER-LS 103 - FIRST-YEAR SEMINAR IN LITERATURE
3 credits.
Interdisciplinary course for first-year students. Topic will vary with instructor and will be announced in the Timetable. Enrollment limited. Enroll Info: None
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 2011

INTER-LS 106 - FIRST-YEAR SEMINAR IN THE SOCIAL SCIENCES 3 credits.

Interdisciplinary course for first-year students. Topic will vary with instructor. Enroll Info: None
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 2020

INTER-LS 107 - FIRST-YEAR SEMINAR IN THE SOCIAL SCIENCES AND NATURAL SCIENCES
3 credits.
Interdisciplinary course for first-year students. Topic will vary with instructor and will be announced in the Timetable. Enrollment limited. Enroll Info: None
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: Fall 2020
INTER-LS 110 - FIRST-YEAR SEMINAR IN THE HUMANITIES AND SOCIAL SCIENCES
3 credits.
Interdisciplinary course for first-year students. Topic will vary with instructor and will be announced in the Timetable. Enrollment limited.
Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2018
INTER-LS 118 - FIRST-YEAR SEMINAR IN THE SOCIAL SCIENCES, ETHNIC STUDIES
3 credits.
Interdisciplinary course for first-year students. Topic will vary with instructor and will be announced in the Timetable. Enrollment limited. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2012

INTER-LS 121 - APPROACHES TO CRITICAL THINKING AND WRITING 3 credits.

Enroll Info: Open to Fr in Summer Collegiate Experience (SCE) only
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: Summer 2019

## INTER-LS 145 - HOW TO SUCCEED IN COLLEGE

1 credit.
Introduces students to current research on learning and guides them in applying that knowledge to their own 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. Equips students with strong foundational skills to succeed at a higher education institution. Enroll Info: None
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 2020
INTER-LS/INTER-AG 152 - WAYS OF KNOWING: MEDICINE AND SOCIETY
1 credit.
Sophomores are exposed to a variety of scholarly topics on subjects dealing with medicine and society by campus-wide faculty. Discussions led by faculty who are primary care practitioners. Students are encouraged to explore the possibility of a research experience in their degree program. Enroll Info: Open to Sophomores only

## 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 2019

## 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. Enroll Info: None

## 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 2020

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 21 st 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. Enroll Info: None
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: Fall 2020
INTER-LS/INTER-AG 250 - UNDERGRADUATE RESEARCH EXPERIENCE 1-3 credits.

Participation in research or creative endeavor led by faculty or instructional staff and in undergraduate Research Scholars Program. This course may also include participation in research discussion groups, critiques of readings, and preparation of written or oral reports. Enroll Info: Freshman or Sophomore standing, admission to the Undergraduate Research Scholars Program, and consent of 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: Fall 2020
INTER-LS 260 - INTERNSHIP IN THE LIBERAL ARTS AND SCIENCES 1 credit.

Enables students with outside internships to earn academic credit connected to their work experience, regardless of their major. Using online tools, students collaboratively analyze and discuss their internships with respect to the goals of a liberal arts and sciences education. Enroll Info: None
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: Fall 2020

INTER-LS 300 - TOPICS IN TEACHING AND LEARNING IN THE LETTERS, ARTS, AND SCIENCES
3 credits.
Topics course. Courses offered here will help students understand and reflect on principles of liberal education, and apply those principles to their own learning experiences. Enroll Info: Topics may have additional prerequisites.
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 315 - PARADIGMS AND PROCESS IN ACADEMIC INQUIRY 2 credits.

Designed specifically for the research fellow, this course offers 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? Enroll Info: Must have applied for been accepted as a research fellow in the Undergraduate Research Scholars Progm
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 2020
INTER-LS 700 - PUBLIC HUMANITIES: THEORIES, METHODS, CASES 3 credits.

The aim of this course is to introduce graduate students to a range of methods, theories, and cases that represent the emerging field of the public humanities and to prepare graduate students to explore the range of opportunities that exist for them outside of academia. Students in the seminar will be expected to read, practice, and experiment. The course will focus on the limits, audiences, and outcomes of research in the humanities, including the possibility of translational research. The final project will involve the design and in some cases implementation of a project based upon your scholarly research. Students will undertake out-of-classroom projects and exercises in addition to reading. Enroll Info: None
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
INTER-HE 301 - SPECIAL TOPICS IN HUMAN ECOLOGY 1-3 credits.

Special Topics in Human Ecology for undergraduate students. Subject matter varies. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2019

## INTER-HE/ELPA 660 - FOUNDATIONS OF EDUCATION FOR WORK

 2-3 credits.Analysis of perspectives and issues associated with the development of work-focused education policies and practice. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: No
Last Taught: Fall 2013

## INTER-HE/ELPA 661 - ORGANIZATION AND OPERATION OF EDUCATION FOR WORK PROGRAMS <br> 3 credits.

Procedures, policies and research associated with various systems of work-related education. This course is intended for students who have teaching experience. Enroll Info: None
Requisites: Senior standing
Repeatable for Credit: No
Last Taught: Spring 2014

## INTER-HE/ELPA 742 - FACILITATING LEARNING FOR ADULTS

3 credits.
Analysis of concepts and procedures for helping adults learn. Emphasis on the teaching-learning transactions that encourage and assist adults in their learning activities. Enroll Info: None
Requisites: ELPA/CURRIC 746
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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 PRACTITIONERS1 credit.
Special topics related to applied work and professional skill development in Human Ecology. Subject matter varies. Enroll Info: None
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

INTER-HE/ELPA 826 - EVALUATION FOR ADMINISTRATIVE DECISION MAKING IN EDUCATION
3 credits.
Theory and methods of evaluation for administrators. Models and techniques related to educational needs assessment, program and product development, formative and summative evaluation. Use of evaluative information for administrative decision making and administration of educational evaluation projects. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## 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. Enroll Info: None
Requisites: Declared in the MS Design + Innovation
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## 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. Enroll Info: None 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: Fall 2020

## INTERNATIONAL ACADEMIC <br> PROGRAMS - STUDY ABROAD <br> (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. Enroll Info:
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. Enroll Info: 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. Enroll Info: 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. Enroll Info:
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. Enroll Info:
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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
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
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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
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

## 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. Enroll Info: Current enrollment in a UW-Madison study abroad program

## Requisites: None

Course Designation: Breadth - Either Humanities 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
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. Enroll Info: Current enrollment in a UW-Madison study abroad program

## 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: 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
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: 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. Enroll Info: 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

## 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. Enroll Info: 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. Enroll Info: 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 - 1 st 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
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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info:
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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info:
Current enrollment in a UW-Madison 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: 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. Enroll Info: Enrollment in a UW-Madison resident 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

## 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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
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

## 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. Enroll Info:
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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info:
Current enrollment in a UW-Madison 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

## 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
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: 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. Enroll Info: Current enrollment in a UW-Madison study abroad program Requisites: None
Course Designation: Breadth - Either Humanities or 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

## 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
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: 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
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: 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. Enroll Info: 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

## 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. Enroll Info: 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. Enroll Info:
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\&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

## 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. Enroll Info: 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\&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

## 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. Enroll Info: 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\&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

## 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. Enroll Info:
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\&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

## 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. Enroll Info:
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\&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

## 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. Enroll Info: 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\&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

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. Enroll Info: 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\&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
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. Enroll Info: 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\&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
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. Enroll Info: 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\&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
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. Enroll Info: 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\&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

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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: 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

## 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. Enroll Info:
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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info:
Current enrollment in a UW-Madison 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

## 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. Enroll Info: Current
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

## 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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
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

## 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. Enroll Info:
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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
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

## 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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
Requisites: None
Course Designation: Breadth - Either Social Science or 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
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
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: 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Course Designation: Breadth - Either Biological Science 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

## 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. Enroll Info:
Current enrollment in a UW-Madison study abroad program
Requisites: None
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

## 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. Enroll Info: 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
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## INTERNATIONAL BUSINESS (INTL <br> BUS)

INTL BUS 200 - INTERNATIONAL BUSINESS
3 credits.
A survey of the interrelationships of world business operations; an introduction to current conceptual perspectives; cultural, educational, political and economic constraints, the international financial and trade frameworks, and the problems and challenges facing the multinational corporation. Enroll Info: None
Requisites: Sophomore standing and (ECON 101, 102, or 111); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## INTL BUS/FRENCH 313 - PROFESSIONAL COMMUNICATION AND CULTURE IN THE FRANCOPHONE WORLD <br> 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. Enroll Info: None
Requisites: FRENCH 228 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: Fall 2020
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. Enroll Info: None
Requisites: FRENCH 228, 311, or 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 2020
INTL BUS/FRENCH 315 - ADVANCED INTERDISCIPLINARY STUDIES IN PROFESSIONAL COMMUNICATION
3 credits.
In-depth study, from interdisciplinary perspectives, of key aspects of technical French language for the professions and business, together with an exploration of the history, sociology, and culture of professional environments in the French and Francophone worlds. Enroll Info: None
Requisites: FRENCH 228, INTL BUS/FRENCH 313, or 314
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 2012

## INTL BUS/GEN BUS 320 - INTERCULTURAL COMMUNICATION IN BUSINESS <br> 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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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 2020

## INTL BUS 365 - CONTEMPORARY TOPICS

1-3 credits.
A course for the exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Sophomore standing or member of 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. Enroll Info: None
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 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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: URB R PL/A A E/ECON/REAL EST 306 or member of 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. Enroll Info: None
Requisites: FINANCE/ECON 300 and (MATH 213, 222, or 276); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: FINANCE 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

INTL BUS 765 - CONTEMPORARY TOPICS
1-4 credits.
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: Declared in Business: General Management, MBA
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Declared in Business: General Management, MBA
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info:

## None

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.
Familiarizes students with the field of international studies, and performs an interdisciplinary examination of the cultural, political, economic, and social patterns that have defined the modern world. Enroll Info: None
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 2020

## INTL ST/ANTHRO/FOLKLORE/LINGUIS 211 - GLOBAL LANGUAGE ISSUES <br> 4 credits.

A series of modules, each showcasing one language and its culture. Each module tackles a major issue about language, such as extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality. Enroll Info: None
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
INTL ST 212 - WISCHOLARS: WISCONSIN INTERNATIONAL SCHOLARS PROGRAM SEMINAR
1 credit.
Discussion of international events and topics designed specifically for WIScholars Program participants, geared toward fostering leadership skills. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## 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. Since the Middle East is predominantly Muslim, there will be a special emphasis on Islam as a religion and Muslim peoples. Enroll Info: None
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 2018

## INTL ST/AFRICAN 302 - ARABIC LITERATURE AND CINEMA

3 credits.
An introduction of the most significant topics of contemporary Arabic literature and cinema: the legacy of colonialism, repressive nature of post-independence regimes, discourses on nationalism, religion v. secularization, gender relations, representation of cultural otherness, and the Arab Springs. Course 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. That said, I would be cautious about understanding this course as a comprehensive "survey" of Arabic literature and cinema: it is more accurately a "sampling." And because these books and films, and their cultures are fairly unfamiliar, we will move slowly through them, taking time to reflect on our own process of reading. Enroll Info: None
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

## INTL ST 310 - INTERNATIONAL LEARNING COMMUNITY SEMINAR

 1-3 creditsA 1-3 credit class graded on a Credit / No Credit basis which addresses various international, cross-cultural and language topics of interest to the residents of the International Learning Community. Enroll Info: Open to Fr. Students must be residents of the International Learning Community
Requisites: Reserved Class Section for residents in the International Learning Community, including Adams Hall.
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

## INTL ST/GEOG 311 - THE GLOBAL GAME: SOCCER, POLITICS, AND IDENTITY <br> 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. The course will draw 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. Enroll Info: None
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/GEOG 315 - UNIVERSAL BASIC INCOME: THE POLITICS BEHIND A GLOBAL MOVEMENT <br> 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. Enroll Info: None
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 320 - CONTEMPORARY ISSUES IN INTERNATIONAL STUDIES 1-4 credits.

Topics vary. Course may be repeated but not with same content. Enroll Info: Sophomore standing or consent of instructor

## 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: Yes, unlimited number of completions Last Taught: Fall 2020

## INTL ST 322 - WASHINGTON DC SEMESTER IN INTERNATIONAL

 AFFAIRS INTERNSHIP SEMINAR4 credits.
Washington DC internship in international affairs. Open to program participants only. Enroll Info: Must be a participant in the Washington DC semester in international affairs program
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: 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. Enroll Info: None
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. Enroll Info: None
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? This is one of the questions that threads through this course on the global history of humanitarianism. Examine 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? We will explore 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. Enroll Info:

## None

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/E A STDS/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. Enroll Info: None
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 2020

## 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 contextsensitive, 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. Enroll Info: None 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: Fall 2020

## INTL ST/HISTORY 366 - FROM FASCISM TO TODAY: SOCIAL MOVEMENTS AND POLITICS IN EUROPE <br> 3-4 credits.

Investigates how everyday people shaped European history and politics, from World War I through today. Taking a comparative and interdisciplinary approach, we 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 in the class 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, this course will investigate how people power has shaped the European state, and vice-versa, from 1922 through today. Enroll Info: None
Requisites: One HISTORY course or 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

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

INTL ST 401 - TOPICS IN GLOBAL SECURITY
3-4 credits.
Contemporary issues in international studies in global security. Topics vary. Course may be repeated but not with the same content. Enroll Info: Sophomore standing or 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: Yes, unlimited number of completions
Last Taught: Fall 2020
INTL ST 402 - TOPICS IN POLITICS AND POLICY IN THE GLOBAL ECONOMY
3-4 credits.
Contemporary issues in international studies in politics and policy. Topics vary. Course may be repeated but not with the same content. Enroll Info:
Sophomore standing or 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: Yes, unlimited number of completions Last Taught: Fall 2020

INTL ST 403 - TOPICS IN CULTURE IN THE AGE OF GLOBALIZATION 3-4 credits.

Contemporary issues in international studies in global culture. Topics vary. Course may be repeated but not with the same content. Enroll Info: Sophomore standing or 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: Yes, unlimited number of completions
Last Taught: Fall 2020
INTL ST 404 - TOPICS IN GLOBAL ENVIRONMENT
3-4 credits.
Contemporary issues in international studies in global environment.
Topics vary. Course may be repeated but with same content. Enroll Info:
Sophomore standing or 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

## INTL ST/POLI SCI 423 - SOCIAL MOBILIZATION IN LATIN AMERICA

3 credits.
This course serves as an introduction to the major empirical and theoretical themes in the study of mobilization in Latin America. Enroll Info: Sophomore standing
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

INTL ST/POLI SCI 431 - CONTENTIOUS POLITICS
3-4 credits.
Social movements, revolutions, and riots continually shape and reshape 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. Enroll Info: None 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: Spring 2017

## 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. Enroll Info: 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 2020
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. Enroll Info: None
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 21 st centuries. Enroll Info: 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\&S Credit - 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 2020

INTL ST 501 - STUDY ABROAD TOPICS IN GLOBAL SECURITY 1-6 credits.

Course reserved as a course equivalency for topics courses done in conjunction with Study Abroad. Enroll Info: Concurrent enrollment in a UW-Madison Study Abroad program
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
INTL ST 502 - STUDY ABROAD TOPICS IN POLITICS AND POLICY IN THE GLOBAL ECONOMY
1-6 credits.
Course reserved as a course equivalency for topics courses done in conjunction with Study Abroad. Enroll Info: Concurrent enrollment in a UW-Madison Study Abroad program
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
INTL ST 503 - STUDY ABROAD TOPICS IN CULTURE IN THE AGE OF GLOBALIZATION
1-6 credits.
Course reserved as a course equivalency for topics courses done in conjunction with Study Abroad. Enroll Info: Concurrent enrollment in a UW-Madison 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

## INTL ST 504 - STUDY ABROAD TOPICS IN GLOBAL ENVIRONMENT

 1-6 credits.Course reserved as a course equivalency for topics courses done in conjunction with Study Abroad. Enroll Info: Concurrent Enrollment in a
UW-Madison Study Abroad program
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
INTL ST 520 - STUDY ABROAD TOPICS IN INTERNATIONAL STUDIES 1-6 credits.

Course reserved as a course equivalency for topics courses done in conjunction with Study Abroad. Enroll Info: Concurrent 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

INTL ST 523 - INTERNATIONAL INTERNSHIP
1-3 credits.
Course reserved as a course equivalency for topics courses don in conjunction with study abroad. Enroll Info: Concurrent enrollment in a UW-Madison study abroad
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: None
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: Fall 2020

## INTL ST 601 - TOPICS IN GLOBAL SECURITY

1-4 credits.
Treatment of topics in global security. Can be repeated by students but not with the same content. Enroll Info: Requisite varies by topic
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: Fall 2020

## INTL ST 602 - TOPICS IN POLITICS AND POLICY IN THE GLOBAL ECONOMY <br> 1-4 credits.

Treatment of topics in international political economy and policy studies. Can be repeated by students but not with the same content. Enroll Info:
Requisite varies by topic
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 2020
INTL ST 603 - TOPICS IN CULTURE IN THE AGE OF GLOBALIZATION 1-4 credits.

Treatment of topics in in culture in the age of globalization. Can be repeated by students but not with the same content. Enroll Info: Requisite varies by topic
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: Fall 2017

## INTL ST 620 - TOPICS IN INTERNATIONAL STUDIES

1-4 credits.
Treatment of topics in international studies. Can be repeated by students but not with the same content. Enroll Info: None
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: Spring 2015
INTL ST 622 - WASHINGTON DC SEM IN INTERNATIONAL AFFAIRS
SEMINAR
4 credits.
Seminar explores current issues in international affairs and the ways in which different organizations, businesses, corporations, NGOs and IOS seek to address them. Open to participants of the Washington DC semester in international affairs program only. Enroll Info: Must be a participant in the Washington DC semester in international affairs program only
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 2016

## INTL ST 680 - HONORS THESIS COLLOQUIUM

2 credits.
Honors Colloquium: A forum on the challenges of research/writing interdisciplinary topics in international studies. Discussions of strategy, oral presentations, critiquing and support. The seminar spans the process
from initial attempts to final revisions. Enroll Info: Only International
Studies majors writing honors thesis consent of instructor
Requisites: None
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

## INTL ST 681 - SENIOR HONORS THESIS

3 credits.
Individual study and research for International Studies majors writing theses for the honors degree. Enroll Info: International Studies majors writing honors thesis and consent of instructor
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 2017

## INTL ST 682 - SENIOR HONORS THESIS

3 credits.
Individual study and research for majors writing theses for the honors degree; continuation of INTL ST 681. Enroll Info: International Studies majors writing honors thesis and consent of instructor
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 2018

## INTL ST 691 - SENIOR THESIS

3 credits.
Individual study and research for International Studies majors writing theses. Enroll Info: International Studies majors writing honors thesis and consent of 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: No
Last Taught: Fall 2020

## INTL ST 692 - SENIOR THESIS

3 credits.
Individual study and research for International Studies majors writing theses; continuation of INTL ST 691. Enroll Info: INTL ST 691 and declared International Studies major
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

## INTL ST 699 - DIRECTED STUDY

1-4 credits.
Graded on lettered basis; requires written cons inst. Enroll Info: Jr or Sr st and written cons inst
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 2020

## INTL ST 720 - GLOBAL STUDIES SEMINAR

3 credits.
Provides a small graduate seminar setting for an interdisciplinary survey of major approaches to the study of globalization. It aims to familiarize students 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. Enroll Info: None
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. Enroll Info: Stdts may not receive cr for both ITALIAN 100101
Requisites: None
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## ITALIAN 101 - FIRST SEMESTER ITALIAN

4 credits.
For students who have not studied Italian. Enroll Info: None
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 2020
ITALIAN 102 - SECOND SEMESTER ITALIAN
4 credits.
Enroll Info: ITALIAN 101 or 181 or 1 yr HS Italian. Open to Fr Requisites: None
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: Fall 2020

## 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. Enroll Info:
Stdts may not receive cr for both ITALIAN 103102
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 with no previous training in the language; oral practice, grammar, reading, reading. Enroll Info: Open to Fr. Stdts may not receive credit for both 101181
Requisites: Declared in honors program
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 182 - SECOND SEMESTER ITALIAN HONORS

4 credits
Accelerated course for honors students. Oral practice, grammar, reading. Enroll Info: ITALIAN 101 or 181, or 2 yrs HS Italian. Open to Fr. Stdts may not receive credit for both 102182

Requisites: Declared in honors program
Course Designation: Frgn Lang - 2nd 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: Spring 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. Enroll Info: Stdts may not receive cr for both ITALIAN 200203
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. Enroll Info: None
Requisites: Not open to students with credit for ITALIAN 102
Course Designation: Frgn Lang - 2nd semester language course Level - Elementary
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Summer 2020

## ITALIAN 202 - FAST-TRACK INTERMEDIATE ITALIAN FOR SPEAKERS OF ROMANCE LANGUAGES <br> 4 credits

Designed for experienced learners of Romance languages, this is an exciting, fast-paced course that will allow you to cover the equivalent of two intermediate-level college semesters of Italian. Enroll Info: None Requisites: 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.
Class reading of modern Italian plays, novels, and short stories; study of idioms, conversation practice; review of grammar. Enroll Info:
ITALIAN 102 or 182 or 2 yrs HS Italian. Open to Fr
Requisites: None
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

ITALIAN 204 - FOURTH SEMESTER ITALIAN
4 credits.
Continuation of ITALIAN 203, with more advanced materials. Enroll Info:
ITALIAN 203 or 3 yrs HS Italian. Open to Fr
Requisites: None
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 2020

ITALIAN 210 - ITALIAN STUDIES ABROAD IN THE HUMANITIES 1-4 credits

Italian studies course taken on a study abroad program for which there is no equivalent on this campus. Enroll Info: Current enrollment in a 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, art, music, politics, and general culture from the Risorgimento to the present. Enroll Info: ITALIAN 204, 205 or equiv
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: Fall 2020
ITALIAN 298 - DIRECTED STUDY
1-3 credits.

Enroll Info: Jr st. Graded on a Cr/N basis; requires cons inst
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
Enroll Info: Jr st. Graded on a lettered basis; requires cons inst
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.For students with language proficiency and graduate students who wish to acquire a reading knowledge of Italian. Intensive grammar; readings from appropriate texts in the humanities, sciences and social sciences. Gives no language credit. Enroll Info: So st

## 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 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. Enroll Info: Current enrollment in a 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. The course will also address Italian phonetics and phonology to develop accurate pronunciation. Enroll Info: ITALIAN 204 or 205
Requisites: None
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 2020

## ITALIAN 312 - WRITING WORKSHOP

3 credits.
Continuation of 311. Development of composition and editing skills with focus on grammatical accuracy, conventions, and rhetorical techniques for organizing information, presenting coherent arguments, and appropriateness of language to topic. Enroll Info: ITALIAN 204 or consent of instructor
Requisites: None
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
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. Through readings, audio-visual materials, and discussions, students will learn about historical, social, and cultural contexts of Medieval and Renaissance periods in Europe and in Italy that surrounded authors and texts read and discussed in this course. Focuses on authors such as Dante, Petrarca, Boccaccio, Michelangelo, Machiavelli, etc. Through examination of Medieval and Renaissance Italian literature and culture, students will also be exposed to and engaged in discussion about the ways in which these texts encompassed art, science, medicine, history, philosophy, and gender. Enroll Info: None
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 2020
ITALIAN 322 - STUDIES IN ITALIAN LITERATURE AND CULTURE II 3 credits.

Deals with the literary and ideological movements of Italian modern and postmodern age (1600-present). It focuses on different genres (poetry, drama, essay, manifesto, novel, short story) and authors, with emphasis on the cultural context. The interactive approach will occasionally involve the use of both audio and video materials, including rare recordings of 20th century authors, film clips, documentaries, and theatrical video segments. Readings, media materials, and class discussions will focus on the various texts within their cultural and historical context. Taught in Italian. Enroll Info: None
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 2020

## 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. Enroll Info: 4th semester proficiency in Italian cons inst
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 2013
ITALIAN/CLASSICS 350 - ROME: THE CHANGING SHAPE OF THE ETERNAL CITY
3-4 credits.

Changing shape of Rome as a physical city and as a cultural metaphor from the Augustan age to the Renaissance. Enroll Info: Jr st or cons inst 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: No
Last Taught: Spring 2020
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. Enroll Info: None 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 2020

## 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. Enroll Info: Current enrollment in a UWMadison 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 423 - CORSO DI STILISTICA APPLICATA

3 credits
Enroll Info: ITALIAN 311-312 or cons inst
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: Spring 2012

## ITALIAN/FRENCH/PORTUG/SPANISH 429 - INTRODUCTION TO THE

 ROMANCE LANGUAGES3 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. Enroll Info: None
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 2020
ITALIAN 450 - SPECIAL TOPICS IN ITALIAN LITERATURE
3 credits.
Senior Proseminar; topics vary. Enroll Info: ITALIAN 321-322 or cons inst
Requisites: None
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

ITALIAN 452 - SPECIAL TOPICS IN ITALIAN STUDIES: CULTURE, FILM, LANGUAGE
3 credits.
Examination of an aspect of Italian studies: culture, film, language; topic varies. Enroll Info: ITALIAN 230 or cons inst
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 2020

## ITALIAN/COM ARTS 460 - ITALIAN FILM

3 credits.
General survey of Italian film and of the relationship between film and the other arts. Consideration of film theory and of the Italian and European socio-political situation in the context of film production. Enroll Info: Stdts taking crse for cr toward Ital major must have Ital 204 or equiv; all other stdts must have COM ARTS 350 or cons inst
Requisites: None
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 2020
ITALIAN 601 - L'OTTOCENTO
3 credits.
Major currents and writers of Italian Romanticism; Foscolo, Leopardi,
Manzoni. Enroll Info: ITALIAN 321-322 or cons inst
Requisites: None
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 - IL SETTECENTO
3 credits.
Enroll Info: ITALIAN 321-322 or cons inst
Requisites: None
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 - IL SETTECENTO
3 credits.
Continuation of 621 Enroll Info: ITALIAN 321-322 or cons inst Requisites: None
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 - IL TEATRO ITALIANO

3 credits
Enroll Info: None
Requisites: None
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 2012
ITALIAN 631 - LINEAMENTI DI LETTERATURA ITALIANA
3 credits.
Enroll Info: Cons inst or 2 yrs college Italian
Requisites: None
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

## ITALIAN 632 - LINEAMENTI DI LETTERATURA ITALIANA

3 credits.
Enroll Info: Cons inst or 2 yrs college Italian
Requisites: None
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 - IL ROMANZO ITALIANO
3 credits.
Continuation of 635 Enroll Info: ITALIAN 321-322 or cons inst
Requisites: None
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 2019
ITALIAN 637 - LA POESIA DEL NOVECENTO
3 credits.
A survey of major poets and poetic currents of the early twentieth century; the "Crepuscolari," Hermeticism. Enroll Info: ITALIAN 321-322 or cons inst
Requisites: None
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 2009

## ITALIAN 641 - IL SEICENTO: RIBELLI, LIBERTINI E ORTODOSSI

 3 creditsLo sviluppo della cultura barocca; letture e discussioni. Enroll Info: Cons inst or 2 yrs college Italian
Requisites: None
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 2011
ITALIAN 651 - IL RINASCIMENTO
3 credits
I: II Quattrocento. Lo sviluppo dell'umanesimo; Poliziano, Lorenzo de' Medici, Pulci, Boiardo, e Alberti; II: II Cinquecento. Ariosto, Machiavelli, Castiglione, Tasso. Enroll Info: ITALIAN 321-322 or cons inst
Requisites: None
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, commentary, discussion, reports. Enroll Info: ITALIAN 321-322 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ITALIAN/MEDIEVAL 671 - IL DUECENTO

3 credits.

I: A systematic study of the earliest literary texts in Italy; the rise of the love lyric among the Sicilian poets; representative narrative works. II: The development of the lyric from Guittone d'Arezzo to the poets of the Dolce Stil Nuovo (Guinizzelli, Cavalcanti, Dante). Enroll Info: ITALIAN 321-322 or cons inst
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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014

## ITALIAN 681 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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.
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
Enroll Info: None
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.
Enroll Info: None
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.
$\mathrm{Cr} / \mathrm{N}$. Enroll Info: Jr or Sr st. Graded on a Cr/N basis; requires cons inst
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.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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.

Graduate-level examination of aspects of Italian literature and culture, including disciplines such as language and cinema. Topic varies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
ITALIAN 731 - LINEAMENTI DI LETTERATURA ITALIANA
3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
ITALIAN 732 - LINEAMENTI DI LETTERATURA ITALIANA
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
ITALIAN 741 - SEICENTO E L ARCADIA
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
ITALIAN 799 - INDEPENDENT STUDY
1-6 credits.

Enroll Info: None
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

ITALIAN/FRENCH/PORTUG/SPANISH 817 - ROMANCE PHILOLOGY 3 credits.

Seminar focusing on linguistic and philological analyses of the textual record in (Hispano-)Romance. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

ITALIAN/FRENCH 821 - ISSUES IN METHODS OF TEACHING FRENCH
AND ITALIAN
1-3 credits.
Enroll Info: French/Italian 820; or foreign lang teaching experience
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
ITALIAN 951 - SEMINAR-STUDIES IN ITALIAN LITERATURE
3 credits.

Enroll Info: None
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

ITALIAN 952 - SEMINAR-STUDIES IN ITALIAN LITERATURE 3 credits.

Enroll Info: None
Requisites: 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
ITALIAN 990 - INDIVIDUAL RESEARCH
1-12 credits.
In connection with the doctoral dissertation. Enroll Info: None 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

## JEWISH STUDIES (JEWISH)

## JEWISH 202 - TOPICS IN JEWISH STUDIES

3 credits.
Special topics in Jewish studies. The topic is footnoted in the Timetable.
Enroll Info: So st
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 2011

## JEWISH/LEGAL ST/RELIG ST 203 - JEWISH LAW, BUSINESS, AND ETHICS <br> 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. Enroll Info: None
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
JEWISH/RELIG ST 211 - INTRODUCTION TO JUDAISM
4 credits.
General introduction to Judaism covering the biblical, classical rabbinic, medieval, and modern periods. Enroll Info: None
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/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. Enroll Info: None
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: 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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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
JEWISH/CLASSICS/LITTRANS/RELIG ST 227 - INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)
4 credits.
Introduction to the literature and literary history of the Old Testament, Apocrypha, Dead Sea Scrolls, Talmud, and Midrashim. Enroll Info: Not open to students that have completed HEBR ST 217
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: No
Last Taught: Fall 2020

## JEWISH 230 - ELEMENTARY TOPICS IN JEWISH LITERATURE

 3-4 credits.Elementary-level topics course in Jewish literature. Enroll Info: None 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 2020

## JEWISH 231 - ELEMENTARY TOPICS IN JEWISH HISTORY

3-4 credits.
Elementary-level topics course in Jewish history. Enroll Info: Requisite varies by topic
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 232 - ELEMENTARY TOPICS IN JEWISH PHILOSOPHY AND THE ARTS
3-4 credits.
Elementary-level topics course in Jewish philosophy and the arts. Enroll Info: Requisite varies by topic
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-level course in Jewish Studies; topics drawn from the social sciences and vary by semester. Enroll Info: Requisite varies by topic
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.
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. Enroll Info: Successful completion of or exemption from Com A requirement. Open to Fr .
Requisites: None
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 2020
JEWISH/CLASSICS 241 - INTRODUCTION TO BIBLICAL ARCHAEOLOGY 4 credits.

An overview of archaeology and its relationship to understanding the biblical world. Enroll Info: None
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 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. Enroll Info: For Communication B sections, satisfied Communication A requirement
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 2020
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. Enroll Info: None
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

JEWISH/RELIG ST 278 - FOOD IN RABBINIC JUDAISM
3-4 credits.
Rabbinic literature frames the fundamental attitudes for how Judaism relates to food. Students will examine the history of food in rabbinic Judaism. In addition, theories from the field of food studies will be applied to rabbinic texts. Enroll Info: None
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. Enroll Info: None
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 2020

## JEWISH 299 - DIRECTED STUDY

1-3 credits.
Enroll Info: Graded on a lettered basis; So st; requires cons inst
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 for different periods and genres; class discussions in Hebrew. Enroll Info: Jewish Studies 202
Requisites: None
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 2020

## JEWISH/HEBR-MOD 302 - INTRODUCTION TO HEBREW LITERATURE

3 credits.
Continuation of 301. Enroll Info: Jewish Studies 301
Requisites: None
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 2020

## 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. Enroll Info: None
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: No
Last Taught: Spring 2018

## JEWISH/LITTRANS/RELIG ST 328 - CLASSICAL RABBINIC LITERATURE IN TRANSLATION <br> 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. Enroll Info: None
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: 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). Enroll Info: None
Requisites: 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 <br> 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. Enroll Info: Sophomore standing
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: No
Last Taught: Spring 2020

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. Enroll Info: None
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
JEWISH 343 - ISRAELI FICTION IN TRANSLATION
3-4 credits

Major writers, trends and themes in Israeli fiction from pre-State period to present. Meets with LITTRANS/JEWISH 367. Enroll Info: None
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: No
Last Taught: Fall 2014
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. Enroll Info: Sophomore standing
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: No
Last Taught: Spring 2016

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. This course 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. Enroll Info: Sophomore standing
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: 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. Meets with Hebrew Studies 343. Enroll Info: Open to Fr. 4th credit earned by prosmr meetings research paper
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: No
Last Taught: Fall 2017
JEWISH/HISTORY 374 - MODERN POLITICAL HISTORY OF THE JEWS: ERA OF MASS MOVEMENTS, 1870-1970
4 credits.

This course will focus on Jewish socialist and nationalist political movements, analyzing their origins in imperial Russia in the late 19th century and their development in the Soviet Union, Poland, Palestine/ Israel, and the U.S. in the 20th century. Enroll Info: None
Requisites: None
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 2012
JEWISH/HEBR-MOD 401 - TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE I
3 credits.
Readings in Hebrew literature, class conducted in Hebrew. Enroll Info: Jewish Studies 302.
Requisites: None
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 2020
JEWISH/HEBR-MOD 402 - TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE II
3 credits.
Continuation of 401. Enroll Info: Jewish Studies 401
Requisites: None
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: Spring 2019

JEWISH 430 - INTERMEDIATE TOPICS IN JEWISH LITERATURE 3-4 credits

Intermediate-level topics course in Jewish literature. Enroll Info: Requisite varies by topic
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 2020
JEWISH 431 - INTERMEDIATE TOPICS IN JEWISH HISTORY 3-4 credits

Intermediate-level topics course in Jewish history. Enroll Info: Requisite varies by topic
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: Fall 2020

JEWISH 432 - INTERMEDIATE TOPICS IN JEWISH PHILOSOPHY AND THE ARTS
3-4 credits.
Intermediate-level topics course in Jewish philosophy and the arts. Enroll Info: Requisite varies by topic
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: Fall 2020

JEWISH 433 - INTERMEDIATE TOPICS IN JEWISH STUDIES: SOCIAL SCIENCES
3-4 credits
Intermediate-level course in Jewish Studies; topics drawn from the social sciences and vary by semester. Enroll Info: Requisite varies by topic
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 2018

## 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. Enroll Info: None
Requisites: 3 credits of 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
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. Enroll Info: None
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
JEWISH/RELIG ST 448 - CLASSICAL RABBINIC TEXTS
3 credits.
Introduction to the language and literature of the rabbinic period in Judaism (2nd-7th century CE). Acquisition of language skills to read Hebrew texts of this period, including Mishna, Tosephta, and Midrash. Enroll Info: Hebrew 202 or 324 or consent of instructor
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: No
Last Taught: Fall 2012
JEWISH 450 - UNDEGRADUATE SEMINAR IN JUDAISM AND THE ARTS 3 credits.

This course provides an understanding of Jewish art and artists in the shaping of culture both historically and today through lectures and discussions; guest scholars, artists and critics; and performances, exhibitions and screenings. Enroll Info: None
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 2014

## JEWISH/CLASSICS 451 - BIBLICAL ARCHAEOLOGY

3 credits.
An examination of current problems, methods, and trends in archaeological research in the lands of the Bible. Enroll Info: Junior standing
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: Spring 2018
JEWISH/CLASSICS 452 - BIBLICAL ARCHAEOLOGY
2 credits.
Applies knowledge and skilled gained from the broad survey conducted in JEWISH/CLASSICS 451 to specific problems of Levantine archaeology. Students focus on in-depth analysis of material remains, geographic and topographic issues, and philological difficulties in ancient records describing the geography and history of the area. Students work separately and in teams to address these problems, conducting novel research, synthesizing their findings, and presenting the results of their research in archaeological reports. Enroll Info: None
Requisites: JEWISH/CLASSICS 451
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

## JEWISH 490 - TOPICS IN JEWISH STUDIES

3 credits.
Special topics in Jewish studies. The topic is footnoted in the Timetable. Enroll Info: Jr st; some prior coursework in Jewish studies or cons inst
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 2012
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. Enroll Info: Jr st
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 2020

JEWISH/HEBR-BIB 513 - BIBLICAL TEXTS, POETRY
3 credits.
Critical reading of selected texts from the Minor Prophets and the
Writings. Enroll Info: HEBR-BIB 324
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
Last Taught: Fall 2017
JEWISH/HEBR-BIB 514 - BIBLICAL TEXTS, POETRY
3 credits.
Continuation of 513. Enroll Info: HEBR-BIB/JEWISH 513
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
Last Taught: Spring 2013
JEWISH/CURRIC/HISTORY 515 - HOLOCAUST: HISTORY, MEMORY AND EDUCATION
3 credits.
This course explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, students will critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms. Enroll Info: Jr st or cons inst
Requisites: None
Course Designation: Gen Ed-Communication Part B
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 2020

## JEWISH/HISTORY 518 - ANTI-SEMITISM IN EUROPEAN CULTURE,

 1700-19453 credits.
A critical review of major theories of anti-Simitism and a history of modern anti-Semitism. Enroll Info: Jr st
Requisites: None
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 2019

JEWISH 533 - READINGS IN CONTEMPORARY HEBREW LITERATURE 3 credits

Enroll Info: JEWISH/HEBR-MOD 402
Requisites: None
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 2012
JEWISH 534 - READINGS IN CONTEMPORARY HEBREW LITERATURE 3 credits.

Enroll Info: JEWISH 533
Requisites: None
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: Spring 2014
JEWISH/ENGL 539 - JEWISH LITERATURES IN DIASPORA
3 credits.
An exploration of Jewish literature in English and in Anglophone contexts. Enroll Info: None
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 2019
JEWISH/ENGL 593 - LITERATURE OF JEWISH IDENTITY IN AMERICA
3 credits.
The construction of Jewish American identity within American life. Enroll Info: None

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

JEWISH 630 - ADVANCED TOPICS IN JEWISH LITERATURE 3-4 credits

Advanced-level topics course in Jewish literature. Enroll Info: Requisite varies by topic
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 Last Taught: Spring 2019

## JEWISH 631 - ADVANCED TOPICS IN JEWISH HISTORY

3-4 credits
Advanced-level topics course in Jewish history. Enroll Info: Requisite varies by topic
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 2016

JEWISH 632 - ADVANCED TOPICS IN JEWISH PHILOSOPHY AND THE ARTS
3-4 credits
Advanced-level topics course in Jewish philosophy and the arts. Enroll Info: Requisite varies by topic
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 2018

JEWISH 633 - ADVANCED TOPICS IN JEWISH STUDIES: SOCIAL SCIENCES
3-4 credits
Advanced-level course in Jewish Studies; topics drawn from the social sciences and vary by semester. Enroll Info: Requisite varies by topic
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 Last Taught: Spring 2014

JEWISH/POLI SCI 665 - ISRAELI POLITICS AND SOCIETY 3-4 credits.

Course provides historical and analytical understanding of Israeli internal political life and institutions. Attention will be paid to political culture, coalition formation and ethnic politics as they are manifested in Israeli politics. The effect of regional conflict upon Israel's domestic politics will also be considered. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 104, 120, 140, 182, 184,
INTL ST 101 or 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 - Advanced
L\&S Credit - Counts 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

## JEWISH 675 - RESEARCH COLLOQUIUM FOR MAJORS

1 credit.
Colloquium for students conducting research under Jewish Studies 677, which must be taken concurrently. Discussion of problems that arise in conducting research, interpreting evidence, and composing an argument. Students will present research-in-progress for group discussion. Enroll Info: Major in Jewish studies; permission of undergrad advisor; cons inst. Con reg in JEWISH 677
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: Spring 2020
JEWISH 677 - INDEPENDENT RESEARCH FOR MAJORS
3 credits.
Original research project supervised by individual faculty; only for students majoring in Jewish studies. Topics depend upon student's interest and faculty member's expertise. Students must register concurrently in Jewish Studies 675. Enroll Info: None
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
JEWISH 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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 2015

## JEWISH 682 - SENIOR HONORS THESIS

3 credits.
Enroll Info: None
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 2016
JEWISH 691 - SENIOR THESIS
3 credits.

Enroll Info: None
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
JEWISH 692 - SENIOR THESIS
3 credits.
Enroll Info: None
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
JEWISH 699 - DIRECTED STUDY
1-3 credits.
Enroll Info: Graded on a lettered basis; Jr st; requires cons inst
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 2020
JEWISH/HEBR-BIB 954 - THE DEAD SEA SCROLLS
2 credits.
Research in the literature, religion, and society of the Qumran community.
Enroll Info: 2 yrs of Biblical Hebrew Graduate standing, or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## JOURNALISM AND MASS COMMUNICATION (JOURN)

## JOURN 150 - INTRODUCTION TO SPORTS COMMUNICATION

 3 credits.We explore the central activities and concepts related to various communication professions involved in the realm of sports. These activities sports journalism, sports broadcasting, sports marketing communications, and sports public relations. We also consider major social issues that impinge upon these professions including how sports and media intersect with concerns associated with race and gender. We conclude with an exploration of strategies that students can put into place now and in the future to build careers in sports communications and beyond. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Summer 2020
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. Enroll Info: None
Requisites: Undergraduate students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special students)
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## 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. Throughout, students will 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 21 st 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. Enroll Info: None
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: Summer 2020
JOURN 176 - SPECIAL TOPICS IN MASS COMMUNICATION
3 credits.
Special focus on a specific conceptual issue or topic involving mass communication. Enroll Info: Freshmen or Sophomore standing 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 2020
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. Enroll Info: Open to Fr; completion of Com-A crse
Requisites: Freshman, sophomore, or junior standing only
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: Fall 2020
JOURN 202 - MASS COMMUNICATION PRACTICES
6 credits.
Communication as a process involving sender and receiver, message and medium. Course provides students with a foundation of basic communication skills, helps students develop an appreciation of how different media influence the nature of information presented, and introduces students to technical skills. Enroll Info: None
Requisites: JOURN 201 and Declared in Journalism
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## JOURN 203 - INFORMATION FOR COMMUNICATION

2 credits.
Prepares students with the information skills - information gathering and sourcing, information analysis and synthesis, and information visualization and presentation - that are used by professionals in journalism and strategic communication. Feature topics dedicated to introducing practical techniques that enhance basic skills related to the collection, evaluation and sharing of information. Enroll Info: None
Requisites: Declared in Journalism, JOURN 201 and concurrent enrollment in JOURN 202
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
JOURN 335 - PRINCIPLES AND PRACTICES OF REPORTING 4 credits.

Basic reporting for print and electronic media. Students will bring together technical and conceptual skills by creating a variety of print, audio, and web-based news stories on a current public issue. Enroll Info: None
Requisites: JOURN 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: Fall 2020

## 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. Enroll Info: None
Requisites: JOURN 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: Fall 2020
JOURN 350 - SPORTS MARKETING COMMUNICATIONS
3 credits.
We 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. As we examine each of these activities, we will focus on the marketing communications associated with each of these activities. Enroll Info: None
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 2020

## JOURN/POLI SCI/URB R PL 373 - INTRODUCTION TO SURVEY RESEARCH <br> 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. Enroll Info: 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 2020

## 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. Students will explore and develop community context stories that originate in a range of venues from the courts to the schools. Enroll Info: JOURN 335

## 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 2020
JOURN 404 - INTERPRETATION OF CONTEMPORARY AFFAIRS 4 credits.

Preparing and writing of editorials, columns and news analyses. Enroll Info: JOURN 335
Requisites: Declared in Journalism major and JOURN 335; not eligible to enroll in more than one 400-level Journalism course per term
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. Enroll Info: None
Requisites: JOURN 335
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

## JOURN 411 - MULTIMEDIA DESIGN

4 credits.
This course focuses on visual communication and graphic design in multimedia contexts. Students 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. Enroll Info: None
Requisites: JOURN 335 or 345
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
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 prrocesses; (2) skills for telling interesting and artful stories; and (3) strategies for making reasonable judgments about scientific evidence. Enroll Info: JOURN 335; cons inst for non-majors
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: Spring 2015

## JOURN 417 - MAGAZINE PUBLISHING

4 credits.
This course takes an integrated, in-depth approach to magazine management, writing, editing and design. It covers the magazine industry from both the editorial and business ends, bringing together journalism and strategic communication students. The course produces Curb magazine in print, online and mobile formats. Enroll Info: None
Requisites: JOURN 335 or 345
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

## JOURN 420 - INVESTIGATIVE REPORTING

4 credits.
This class will teach the techniques of investigative and long-form enterprise reporting. Students will engage in extensive reporting in the field, and produce a final project. Enroll Info: None
Requisites: JOURN 335
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

## JOURN 425 - VIDEO JOURNALISM

4 credits.
Video journalism is widespread, thanks to online news and sources such as YouTube. In this course, students will 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. Students will focus on capturing stories with strong visuals and ambient sound of the people affected by issues and events. Enroll Info: None
Requisites: JOURN 335
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

## 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. The course will 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. Enroll Info: None 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. Enroll

## Info: None

Requisites: JOURN 345
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

## 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.

## Enroll Info: None

Requisites: JOURN 345
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

## JOURN 449 - ACCOUNT PLANNING AND STRATEGY

4 credits.
Process of planning, implementing, and analyzing strategic communication campaigns. Enroll Info: None
Requisites: JOURN 345
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
JOURN 450 - ADVANCED SPORTS COMMUNICATION
4 credits.
Designed to give experienced reporting and strategic communication students a grounding in the 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. Enroll Info: None
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: Fall 2019

## JOURN 453 - STRATEGIC MEDIA RELATIONS

4 credits.
This course will give students 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. Enroll Info: None
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.
Introduces students to new 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. Enroll Info: None
Requisites: JOURN 335 or 345
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.
Designed to give students a usable grasp of skills needed to conduct professional-level journalism and strategic communication in long-
form video. Students will produce documentary pieces of covering a contemporary topic of local or regional interest and complete other exercises in video analysis, composition and production. Enroll Info: None
Requisites: JOURN 335 or 345
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

## 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. Enroll Info: None
Requisites: JOURN 335 or 345
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

## 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. This course is geared toward students with an interest in careers in advertising, public relations, or other forms of strategic communication. Because of the rapid growth of digital communications, students will benefit from knowing more about digital media whether working in account, media or creative at an agency or corporation. Enroll Info: None
Requisites: Declared in Journalism 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 2020
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. A depth course; it takes one core element of a strategic communications campaign, and provides an in-depth study into the topic area of public relations. This course is geared toward students with an interest in careers in advertising, public relations, or other forms of strategic communication. Enroll Info: None
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 2020

## 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. A depth course; it takes one core element of a strategic communications campaign, and provides an in-depth study into the topic area of digital media. Geared toward those with an interest in careers in advertising, public relations, or other forms of strategic communication. Enroll Info: None
Requisites: Declared in Journalism 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 2020
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. This course is designed as a capstone experience ('concluding achievement') within the strategic communications track of the Journalism major. Enroll Info: None
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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
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

## 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. Enroll
Info: Fall semester, Journalism Srs; spring semester, Sr st
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 2019
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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
JOURN 565 - EFFECTS OF MASS COMMUNICATION
4 credits.

Use and effects of mass communication for individuals and societies. Course 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. Enroll Info: Jr st
Requisites: None
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

## 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. Enroll Info: None
Requisites: Senior 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

## JOURN 601 - COLLOQUIUM IN PROFESSIONAL COMMUNICATION CAREERS <br> 1 credit.

Explores a wide variety of post-undergraduate communication career options available to students. 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.). Enroll Info: None
Requisites: Declared in Journalism
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: JOURN 202, COM ARTS 325, HDFS 362, 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 2020

## JOURN/COM ARTS/LSC 617 - HEALTH COMMUNICATION IN THE INFORMATION AGE <br> 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. Enroll Info: None
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

## 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. Enroll Info:

## None

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

## JOURN 620 - INTERNATIONAL COMMUNICATION

4 credits.

Historical, political, economic and cultural trends in global mass communication systems. Enroll Info: None
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
JOURN 621 - MASS COMMUNICATION IN DEVELOPING NATIONS
4 credits.
Development, structure, and role of mass communication systems in Africa, Asia, and Latin America. Enroll Info: Jr st
Requisites: None
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 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 their effects of these technologies on the individual and societal levels. The course illuminates the psychological, social, political, industrial, and policy implications of the use of emerging communication technologies. Designed to equip students 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. The course will emphasize empirical approaches to understanding these relationships, delving into contexts such as journalism, strategic communication, and the place of digital media in politics and society.

## Enroll Info: None

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 2020

## JOURN/ART HIST/HISTORY/LIS 650 - HISTORY OF BOOKS AND PRINT CULTURE IN EUROPE AND NORTH AMERICA <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: JOURN 150, 162, 201, or 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: Summer 2020

## JOURN 658 - COMMUNICATION RESEARCH METHODS

4 credits.
Survey of methods for investigating mass communication process and effects. Enroll Info: Journ majors: admission to the school; non-majors: cons inst
Requisites: Declared in Journalism
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
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. Enroll Info: None
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 2014

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. This class will explore 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. Enroll Info: None
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 666 - PROFESSIONAL RESPONSIBILITY IN MASS

COMMUNICATION
3 credits.
Explores concept of "professionalism" in journalism and strategic communication, with emphasis on societal expectations for media and ethical systems. Applies theory to specific cases. Enroll Info: Admission to Sch of Journ Mass Comm, Sr st
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 2012
JOURN 669 - LITERARY ASPECTS OF JOURNALISM
3 credits.
Critical reading of the best reporting and writing. Enroll Info: Jr st
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 2020

JOURN 670 - COMMUNITY SERVICE LEARNING: TECHNOLOGY FOR SOCIAL CHANGE
3 credits.
The course is an upper-level undergraduate/graduate service learning course that integrates the study of the social impact of new communication technologies into community engagement practices. The course will illuminate social, political, psychological, and policy implications of the adoption and use of new and emerging technologies and provide 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. Enroll Info: None
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. Enroll Info: None
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 2016

JOURN 676 - SPECIAL TOPICS IN MASS COMMUNICATION
1-4 credits.
Analysis of a conceptual mass communication issue in more depth than is available in existing courses. Enroll Info: Requisite varies by topic
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: Spring 2017
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. Enroll Info: None
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 2017

JOURN 678 - LEGAL \& ETHICAL DIMENSIONS OF EMERGING MEDIA 3 credits.

Examines the legal ethical questions surrounding digital media and their effects on society and individuals. Enroll Info: None
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.

Enroll Info: None
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
JOURN 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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
JOURN 691 - SENIOR THESIS
3 credits.
Enroll Info: None
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.
Enroll Info: None
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
Students may earn no more than three internship credits as a part of their degree program. Enroll Info: Admission to Sch of Journ and cons inst; graded on a $\mathrm{Cr} / \mathrm{N}$ basis
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 2020

JOURN 698 - DIRECTED STUDY
1-6 credits.
Enroll Info: Jr or Sr st. Graded on $\mathrm{Cr} / \mathrm{N}$ basis; requires cons inst
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.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020

## JOURN 800 - ADVANCED MASS MEDIA PRACTICE

3 credits.
Advanced projects in professional practice in mass media. When course focuses on journalism, it typically emphasizes advanced projects in specialized reporting. Course is designed for professional-track M.A. students. Emphasis varies with instructor. Course may be repeated with different instructor. Enroll Info: Professional experience or crses cons inst Requisites: 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 behaviroal effects. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## JOURN 802 - MASS COMMUNICATION AND SOCIETY

3 credits.
This course 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
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 students to literature of mass communication. Enroll Info: None
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

## JOURN/LSC 811 - CONCEPTUALIZATION AND DESIGN OF MASS COMMUNICATION RESEARCH <br> 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.
Enroll Info: None
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.

Course in research methodology designed to assist students to design research, analyze and interpret evidence, and develop a deeper appreciation of research strategies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## JOURN 813 - PRACTICUM IN COMMUNICATION RESEARCH

 3 credits.This course provides a detailed practicum on conducting and publishing empirical research in mass communication. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
JOURN 820 - MASS COMMUNICATION LAW AND POLICY
3 credits.
Intensive reading and discussion focussing on theories of press freedom and current issues in mass communication law and policy. A bibliographic essay will be required. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
JOURN 821 - HEALTH COMMUNICATION
3 credits.
This course considers the application and integration of theory in understanding the effects of mass media, with close attention to health communication campaign messages. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## JOURN/ENVIR ST/LSC 823 - SCIENCE AND ENVIRONMENT COMMUNICATION <br> 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. Enroll Info:

## None

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.
This course examines key theoretical and empirical readings in the area of race/ethnicity and media. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## JOURN/LSC 825 - ETHICS AND COMMUNICATION

3 credits.
Explores critical media ethics questions shaped by practices in a disruptive digital environment. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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.). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## JOURN/COM ARTS/LSC 831 - PSYCHOLOGY OF ENTERTAINMENT MEDIA <br> 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
JOURN/LSC 880 - TOPICS IN MASS COMMUNICATION 3 credits.

In-depth investigation of a specific topic in mass communication. Enroll Info: None
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

JOURN/LSC 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. Enroll Info: None
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

## JOURN 902 - GRADUATE TEACHING COLLOQUIUM

1 credit.
Colloquium series for graduate students in fields related to communication and information studies. Course meets once per week for a teaching presentation by a guest faculty or staff member on various theoretical and practical approaches to teaching and learning in the communication and information fields. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## JOURN/HISTORY 919 - SEMINAR-HISTORY OF MASS COMMUNICATION <br> 3 credits.

Seminar in the history of mass communication in which students are expected to produce original research based on primary documents Enroll Info: None
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 2011
JOURN 990 - THESIS
1-9 credits
Enroll Info: None
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
JOURN 999 - INDEPENDENT RESEARCH PROBLEMS
2-4 credits.

Enroll Info: None
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

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2018

## KINES 112 - MAKE IT COUNT: MEASURING PHYSICAL ACTIVITY BEHAVIOR <br> 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Classified as Pre-Physical Education
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## KINES 127 - INTRODUCTION TO ATHLETIC HEALTHCARE

2 credits.
Issues and basic concepts of athletic healthcare including health care systems, interprofessonal 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. Enroll Info: None

## 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 2020

## KINES 129 - INTRODUCTION TO YOGA PRACTICE

 1 credit.An introduction to yoga practice, philosophy, history, and traditions. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2015
KINES 134 - MOVEMENT TECHNIQUES FOR STRESS MANAGEMENT 1 credit.

Use of movement strategies to develop skills for reducing tensions associated with stress. Strategies include neuromuscular relaxation, flexibility exercises and movement awareness techniques. Enroll Info: None
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## KINES 141 - THE SCIENCE \& PRACTICE OF MARATHON/DISTANCE RUNNING <br> 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. Enroll Info: 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 <br> 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. Enroll Info: None
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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Fall 2015

## KINES 150 - FOUNDATIONS OF HEALTH BEHAVIOR AND HEALTH EQUITY <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info:
None
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. Enroll Info: None
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 2020

## KINES 227 - INTRODUCTION TO CLINICAL ANATOMY OF HUMAN MOVEMENT <br> 2 credits.

Designed to provide students with a foundational knowledge in musculoskeletal anatomy and anatomical considerations related to human movement and physical activity. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Declared in Physical Education, Kinesiology, or classified as Pre-Physical Education
Repeatable for Credit: No
Last Taught: Spring 2015
KINES 300 - PRACTICUM IN KINESIOLOGY
1-3 credits.
Supervised experience in a specialized area of physical education. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Athletic Training
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Skillspecific units present experiential assignments that increase learner confidence. Each unit produces print or digital materials for practical professional use with an emphasis on innovation. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: KINES 328, 337, or ANAT\&PHY 337
Repeatable for Credit: No
Last Taught: Spring 2020

## KINES 317 - EVALUATION AND DIAGNOSIS OF ORTHOPEDIC CONDITIONS <br> 4 credits.

The evaluative skills and knowledge needed for minimum competency in the recognition, evaluation, and diagnosis of orthopedic conditions common to active populations. Enroll Info: None
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. Enroll Info: None
Requisites: (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: Fall 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## KINES 327 - CURRENT TOPICS IN OUTDOOR PURSUITS

1 credit.
Introduce students to several outdoor activities to enable the teaching of these topics. Enroll Info: None
Requisites: KINES 370
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: MATH 112 or placement in MATH 113 and (STAT 371, 301, or PSYCH 210)
Repeatable for Credit: No
Last Taught: Fall 2020
KINES 332 - SPECIALIZED TEACHING EXPERIENCE
1 credit.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2013

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. Enroll Info: None

## Requisites: None

Repeatable for Credit: No
Last Taught: Fall 2020
KINES 353 - HEALTH AND PHYSICAL EDUCATION IN A MULTICULTURAL

## SOCIETY

2 credits.
Become familiar with aspects and perspectives of diversity and culture, concepts and the importance of culturally responsive practice, and the Act 31 requirement for teacher education. Perform a cultural self-mapping to learn how cultural backgrounds influence attitudes and actions. Apply concepts through a hands-on multicultural field experience. Enroll Info: None
Requisites: Declared in Physical Education, Kinesiology, or Health Promotion and Health Equity and 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 2020
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Kinesiology, Athletic Training or Promoting Activity for Diverse Abilities certificate
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: KINES 315 and 316
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Declared in Physical Education or Health Promotion and Health Equity
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 2020

## KINES 371 - METHODS AND PRACTICUM OF TEACHING PK-12 DANCE

 AND GYMNASTICS3 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. Enroll Info: None
Requisites: Declared in Physical Education and KINES 370 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:

## None

Requisites: Declared in Physical Education and KINES 370 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Spring 2020
KINES 373 - METHODS AND PRACTICUM OF TEACHING SECONDARY

## SPORT CONCEPTS AND SKILLS

3 credits.
Methods of instruction in sports concepts and skills. 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. Enroll Info: None
Requisites: Declared in Physical Education and KINES 370 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 ACTIVITY2 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Declared in Kinesiology
Repeatable for Credit: No
Last Taught: Fall 2020
KINES 399 - INDEPENDENT STUDY
1-3 credits.
Independent undergraduate study in beginning to intermediate area of study under direct guidance of kinesiology faculty. Enroll Info: None
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

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. Enroll Info: None
Requisites: Declared in Athletic Training
Repeatable for Credit: No
Last Taught: Spring 2020

## KINES 412 - ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION <br> 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. Enroll Info: None
Requisites: Declared in Kinesiology or Physical Education
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: ANAT\&PHY 335 or PHYSIOL 335
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Athletic Training
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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, fluidelectrolyte, heat-temperature regulation. Enroll Info: None
Requisites: Declared in Athletic Training
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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: Fall 2020
KINES/CURRIC 478 - ELEMENTARY SCHOOL PHYSICAL EDUCATION STUDENT TEACHING
2-8 credits
Student teaching placement in elementary school setting. Enroll Info: None
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
KINES/CURRIC 479 - MIDDLE SCHOOL OR HIGH SCHOOL PHYSICAL EDUCATION STUDENT TEACHING

2-8 credits

Student teaching placement in secondary school setting. Enroll Info:
None
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: KINES 127
Repeatable for Credit: No
Last Taught: Fall 2020

## KINES 501 - THEORY-BASED HEALTH EDUCATION AND HEALTH PROMOTION PROGRAMS <br> 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. Enroll Info: None
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: Fall 2020
KINES 508 - WORKSHOP IN KINESIOLOGY 1-3 credits.

Designed to explore topics in kinesiology and/or occupational therapy. Topics may change each semester. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Kinesiology or Promoting Activities for Diverse Abilities certificate
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Kinesiology and KINES 314
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: ANAT\&PHY 335 or PHYSIOL 335
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: KINES 427
Repeatable for Credit: No
Last Taught: Fall 2020
KINES 528 - SEMINAR IN STRENGTH AND CONDITIONING 1 credit.

Provides scientific knowledge and opportunity to practice the application of strength and conditioning practices. Enroll Info: None
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
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. Enroll Info: None
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 2020

## KINES 547 - SKILLS FOR HEALTH: METHODS AND PRACTICUM OF TEACHING HEALTH <br> 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: KINES 370
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 2020

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. Enroll Info: None
Requisites: KINES 547
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:

## None

Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
KINES 590 - CURRENT TOPICS IN KINESIOLOGY
1-3 credits.

Examination of current topics in the field of kinesiology. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2012

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. Enroll Info: None
Requisites: Graduate/professional standing or declared in Kinesiology Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020
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, an d long term competitive events. Enroll Info: None 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. Enroll Info: None
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. Enroll Info: None
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 2020

KINES 620 - CLINICAL PRACTICUM IN ATHLETIC TRAINING 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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: KINES 620
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
KINES 622 - CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING I 3 credits.

Provides a clinical field experience allowing for practical and skillsoriented 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. Enroll Info: None
Requisites: KINES 621
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: KINES 622
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: KINES 623
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: KINES 624
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## KINES 650 - FOUNDATIONS OF PROFESSIONAL PRACTICE IN ATHLETIC TRAINING <br> 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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: KINES 652
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No

## 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. Enroll Info: None Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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.
Enroll Info: None
Requisites: KINES 654
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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 evidencebased practice and the development of critical reading and scientific writing skills. Enroll Info: None
Requisites: KINES 650
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## KINES 657 - ROLE TRANSITION AND PROFESSIONAL PRACTICE IN ATHLETIC TRAINING <br> 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. Enroll Info: None
Requisites: KINES 623
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None Requisites: KINES 652
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: KINES 654
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## KINES 673 - HEALTHCARE INFORMATICS AND QUALITY IMPROVEMENT

 IN ATHLETIC TRAINING1 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. Enroll Info: None
Requisites: Declared Athletic Training MS
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None
Requisites: KINES 656
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
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: Fall 2020

## KINES 699 - INDEPENDENT STUDY

1-3 credits.
Independent undergraduate work in advanced area of study under direct guidance of kinesiology faculty. Enroll Info: None
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 2020

## 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 selfesteem. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## KINES 713 - NEURAL BASIS OF NORMAL AND PATHOLOGICAL

 MOVEMENT3 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework
requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## KINES 774 - METABOLIC RESPONSES TO EXERCISE AND ENVIRONMENTAL STRESS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
KINES 800 - SEMINAR-EXERCISE PSYCHOLOGY
2 credits.
Research oriented developments in exercise psychology. Enroll Info: None Requisites: 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, kinesthesis, learning, information processing, memory, transfer, feedback, age and gender differences. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
KINES 885 - SEMINAR IN OCCUPATION AND HEALTH
1 credit.
Current theoretical and methodological issues and problems within the study of human occupation and health. Enroll Info: None
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
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. Enroll Info: None
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
KINES 951 - SEMINAR-BIOMECHANICS
2 credits.
Seminar topics in field of biomechanics. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
KINES 953 - HUMAN BIODYNAMICS SEMINAR
1 credit.
Seminar topics in field of human biodynamics. Enroll Info: None
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

## KINES/POP HLTH 955 - SEMINAR - PHYSICAL ACTIVITY EPIDEMIOLOGY <br> 1 credit.

Current research developments in physical activity epidemiology. Enroll Info: None
Requisites: 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
KINES 961 - SEMINAR IN MOTOR CONTROL AND LEARNING 2 credits.

Seminar topics in field of motor control and learning. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013
KINES 990 - RESEARCH OR THESIS
1-12 credits.
Independent research and writing for graduate students under the supervision of kinesiology faculty member. Enroll Info: None
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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
KINES 999 - INDEPENDENT READING
1-4 credits.
Directed study projects for graduate students as arranged with kinesiology faculty member. Enroll Info: None
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

## LA FOLLETTE SCHOOL OF PUBLIC AFFAIRS (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. The class does not intend to do certain things, such as consider rationales for government intervention, or explain different stages of the policy process. Other classes in political science and economics perform such tasks well. Instead, it 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. A student of this class will gain a broad overall knowledge of how the majority of state and federal funding is spent and the policy outcomes associated with that spending. Enroll Info: None
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 2020
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. Enroll Info: None
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

## 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. Students will 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. They will 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. Enroll Info: None
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

## PUB AFFR 274 - TOPICS IN PUBLIC POLICY

3 credits.
Intensive study of selected topics in public policy. Enroll Info: None 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

## PUB AFFR 278 - PUBLIC LEADERSHIP

3 credits.
Leadership is one of the most important but perplexing topics in the public sector; almost all agree its important, but we often disagree about what it actually means, or how to study it. This course aims to demystify the role of leadership in a public setting. We will draw on research from public management, psychology and organization studies to help students 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. The class will mix research with practical examples. The class 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. Enroll Info: None
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 2020

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. Enroll Info: None
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

## PUB AFFR 299 - DIRECTED STUDY

## 1-3 credits.

Program of study devised by a student in collaboration with an instructor.

## Enroll Info: None

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

## PUB AFFR 327 - ADMINISTRATIVE INTERNSHIP

3 credits.
Provides students with 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 students engage in active reflection on this experience and self-assessment through written assignments, reflections, and readings to help students make the most of their internships. Enroll Info: Students must be registered for this course during the term in which the internship takes place (no credit can be given for past work experience). The internship may be in the public, nonprofit, or for-profit sectors that relate to public service and may be paid or unpaid.
Requisites: Declared in the Public Policy Certificate and (PUB AFFR 200
or POLI SCI 272)
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

## 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. Then 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. Enroll Info: None
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 2020

## PUB AFFR/POLI SCI 419 - ADMINISTRATIVE LAW

3-4 credits.
Delegation of powers, elements of fair administrative procedure, judicial control over administrative determination. Enroll Info: Not open to students with credit for POLI SCI 420 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2019
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. It will begin with an introduction to key concepts in the measurement of inequality and poverty and an overview of recent trends. We will systematically examine how public policy shapes inequality across a range of topical areas including labor markets, education, taxation, health, housing and criminal justice. Enroll Info: None 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 2020

## PUB AFFR 523 - POLICY, PRIVACY, AND PERSONAL IDENTITY IN THE POSTGENOMICS ERA <br> 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. Enroll Info: None
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 2019

## 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.

## Enroll Info: None

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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## PUB AFFR/CIV ENGR 694 - MANAGEMENT OF CIVIL INFRASTRUCTURE SYSTEMS <br> 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. Enroll Info: Grad st or cons inst, CIV ENGR 494 or equiv
Requisites: None
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 centuryand 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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PUB AFFR/ED POL/ELPA 765 - ISSUES IN EDUCATIONAL POLICY ANALYSIS <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

PUB AFFR/ED POL/ELPA 795 - ECONOMICS OF EDUCATION 3 credits.

Shows how basic economic concepts are applied to the study of education policy and what economic research has concluded about the efficiency of various types of education systems. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## PUB AFFR 799 - INDEPENDENT READING

1-3 credits.
Enroll Info: None
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

## PUB AFFR 800 - PUBLIC AFFAIRS PROFESSIONAL DEVELOPMENT WORKSHOP <br> 1 credit.

This public affairs career development seminar includes sessions on professional writing, presentations, and job search skills training for students interested in finding jobs. A significant element of the seminar will be presentations from practitioners from the public, private and nonprofit sectors. Enroll Info: La Follette student
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PUB AFFR 802 - PUBLIC AFFAIRS SEMINAR SERIES

1-2 credits.
This course 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. Enroll Info: None
Requisites: 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

## PUB AFFR/ED POL/GEN\&WS 805 - GENDER ISSUES IN INTERNATIONAL EDUCATIONAL POLICY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2018
PUB AFFR/ENVIR ST/URB R PL 809 - INTRODUCTION TO ENERGY ANALYSIS AND POLICY
3 credits.
Interdisciplinary seminar for the Energy Analysis and Policy Curriculum. Strategy and policy problems in energy policy, both national and international. Enroll Info: Grad st admission to Energy Anal and Policy curric or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
PUB AFFR/ENVIR ST/URB R PL 810 - ENERGY ANALYSIS SEMINAR 1-3 credits.

Interdisciplinary seminar for the Energy Analysis and Policy Curriculum. Quantitative energy content and energy flows as an aid to problem analysis and policy formulation. Enroll Info: Grad st admission to Energy Anal and Policy Curric or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
PUB AFFR 818 - INTRODUCTION TO STATISTICAL METHODS FOR PUBLIC POLICY ANALYSIS
3 credits.
This course provides an introduction to the statistical methods used in public policy. The course will cover the basics of probability, statistics, and quantitative methods in public policy analysis. The course stresses interpretation and presentation of data as well as theory. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

PUB AFFR 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. Enroll Info: Grad st PUB AFFR 818 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: Spring 2020
PUB AFFR 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. Enroll Info: ECON 301 or equiv
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PUB AFFR 827 - ADMINISTRATIVE INTERNSHIP
1-3 credits.
Enroll Info: Grad st in LaFollette School cons inst. Cr for placements in policy related positions in public private agencies with school's Career Devel Coordinator Assoc Dir
Requisites: Declared in Master of Public Affairs program and 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 2020

## PUB AFFR/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## PUB AFFR 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PUB AFFR 854 - MACROECONOMIC POLICY AND INTERNATIONAL

 FINANCIAL REGULATION3 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. Enroll Info: Grad st 1 crse in microecon macroecon, or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
PUB AFFR 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. Enroll Info: None
Requisites: PUB AFFR 818 and 880
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PUB AFFR 857 - POLITICAL ECONOMY OF CORRUPTION AND GOOD GOVERNANCE <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

PUB AFFR 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. Enroll Info: La Follette st PUB AFFR 850
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PUB AFFR 864 - HEALTH POLICY AND POLICY DESIGN
3 credits.
A survey course on health care policy in the United States, including examination of the design of health policy and the politics of health care reform. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
PUB AFFR/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
PUB AFFR 867 - GOVERNMENT FINANCE IN DEVELOPING COUNTRIES
3 credits.
This course explores fiscal decision-making by governments in developing countries, including decisions about the mix and level of public services, the choice of taxes and other financing mechanisms, and decisions about fiscal relationships between levels of government. Enroll Info: PUB AFFR 880 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: Spring 2012

## PUB AFFR 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. Enroll Info: La Follette st PUB AFFR 873
Requisites: Enrollment limited to Graduate Students who have completed Public Affairs 880 and Public Affairs 818
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PUB AFFR/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. Enroll Info: None
Requisites: PUB AFFR 818
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PUB AFFR 873 - INTRODUCTION TO POLICY ANALYSIS
3 credits.
This course develops skills in policy analysis in two ways. First, it sets out the conceptual foundations for understanding the role of policy analysis in democratic politics. Second, it provides training and experience in policy analysis craft. Enroll Info: La Follette st PUB AFFR/POLI SCI/ URB R PL 874, or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PUB AFFR/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Grad st 2 econ crses, including microeconomics
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing and (PUB AFFR 818 and 880), or 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 2020

## PUB AFFR 882 - SOCIAL WELFARE POLICY AND MANAGEMENT

 3 credits.Considers social welfare policies--human capital development, employment, income and family support, and health care--and addresses focal questions about the state's role in social welfare service financing and provision, targeting publicly-funded services, and efficient and effective program administration and evaluation. Enroll Info: PUB AFFR 880 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2009
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 graduate students with skills to understand and negotiate social politics in the United States. Enroll Info: La Follette st or cons inst
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. Enroll Info: None
Requisites: 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 2020
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. Enroll Info: None
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.

This graduate seminar provides 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. Enroll Info: PUB AFFR 880 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PUB AFFR/POLI SCI/URB R PL 890 - FEDERAL BUDGET AND TAX

 POLICY AND ADMINISTRATION3 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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: PUB AFFR 880
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: La Follette grad stdt or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

PUB AFFR 895 - PERFORMANCE MANAGEMENT
3 credits.
Introduces students 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. Enroll Info: PUB AFFR/POLI SCI/URB R PL 878
Requisites: Graduate/professional standing
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. Enroll Info: None
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

## 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 the professional student's ability to communicate with lay and professional audiences. Enroll Info: None
Requisites: None
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
LAND ARC 211 - LANDSCAPE INVENTORY AND EVALUATION METHODS 4 credits.

Inventory and evaluation of physical, biological, visual, and cultural site resources to determine their potential for enhancement of human activities and their sensitivities to use-impact. Emphasis on information sources, data gathering methods and analysis techniques with projects to develop proficiency. Enroll Info: None
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: No
Last Taught: Spring 2020

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. Enroll

## Info: None

Requisites: None
Course Designation: Breadth - Humanities
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
LAND ARC 260 - HISTORY OF LANDSCAPE ARCHITECTURE
3 credits.
A critical and historical analysis of our design of outdoor space. Enroll Info: None
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: Summer 2020
LAND ARC 261 - PRINCIPLES OF LANDSCAPE ARCHITECTURE DESIGN

## AND GRAPHICS

4 credits.
Basic principles in the design of landscapes to aid the student in developing individual capacities and approaches to designing. Principles of graphic communication media and development of practical graphic skills. Enroll Info: None
Requisites: Declared in Landscape Architecture 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: Fall 2020

## 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. Enroll Info: An intro botany crse or cons inst
Requisites: Sophomore standing and (BOTANY/BIOLOGY 130, 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## LAND ARC/ANTHRO/ART HIST/DS/HISTORY 264 - DIMENSIONS OF MATERIAL CULTURE <br> 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. Enroll Info: None

## 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
LAND ARC 289 - HONORS INDEPENDENT STUDY
1-2 credits.
Enroll Info: Enrolled in the CALS Honors Prgm Sophomore or Junior standing. INTER-AG 288
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.
Enroll Info: Open to Freshmen, Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2017

## LAND ARC/F\&W ECOL/HORT/PL PATH 309 - DISEASES OF TREES AND SHRUBS <br> 3 credits.

Fundamental disease concepts, pathogens and causal agents, diagnosis, and biologically rational principles and practices for management of diseases of trees and shrubs. Enroll Info: Includes field trips
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152, 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 321 - ENVIRONMENT AND BEHAVIOR STUDIO - DESIGNING HEALTH PROMOTING ENVIRONMENTS <br> 4 credits.

This course is a design studio in with an emphasis on the application of design principles aimed at promoting people's health and wellbeing in the built environment. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Landscape Architecture BLA
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Landscape Architecture 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: Fall 2020
LAND ARC/BSE/DS 356 - SUSTAINABLE RESIDENTIAL CONSTRUCTION 3 credits.

Properties and use of building materials, framing systems, HVAC
systems, code requirements, conservation of natural resources in
building construction and operation. Enroll Info: None
Requisites: MATH 112, 114, or 171
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S

## Sustain - Sustainability

Repeatable for Credit: Yes, for 3 number of completions
Last Taught: Summer 2020

## 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. Field trips, literature review, term paper, and personal observations required. Enroll Info: Upper class st; basic college- level biology or equiv (such as relevant physical sciences)

## 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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Fall 2020

## 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? Enroll Info: None
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 2020
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. Enroll Info: MATH 114 Sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain-Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## LAND ARC/ENVIR ST/F\&W ECOL/G L E/GEOG/GEOSCI 372 INTERMEDIATE ENVIRONMENTAL REMOTE SENSING <br> 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. Enroll Info: Envir St 301 or consent of instructor, sophomore standing
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2015

## LAND ARC 375 - SPECIAL TOPICS

1-4 credits

## Enroll Info: None

Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## LAND ARC 397 - INTERNSHIP IN LANDSCAPE ARCHITECTURE

 1 credit.An experiential learning opportunity that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. The course allows students to gain valuable applied experience and make professional connections in the field of landscape architecture. Students will apply landscape architecture concepts, practice problem solving-skills, be exposed to multidisciplinary approaches, develop team-work and interpersonal skills, access and use information resources, reflect upon or address ethical and professional issues, and prepare written and oral reports. Enroll Info: None
Requisites: Declared in in Landscape Architecture BLA and sophomore, junior or senior standing only
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: Fall 2020

## LAND ARC 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION <br> 1-8 credits.

Enroll Info: So, Jr or Sr st and cons supervising inst, advisor, and program coordinator
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 2017

## 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. Enroll Info: 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. We will also review the strengths and weaknesses of hand and digital media and the use of both when appropriate. Assignments consist of sketchbook, drawing exercises, and visual communication projects. These assignments will cover advanced hand sketching and graphics, computer graphic techniques, including digital photography, advanced digital color theory and rendering, digital image processing, CAD drafting, 2D/3D modeling, image compositing, media formats, and video. Enroll Info: None

Requisites: LAND ARC 261
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

## 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
LAND ARC/CHICLA 475 - LATINO URBANISM: DESIGN AND ENGAGEMENT IN THE AMERICAN CITY
3 credits.

Urban design in the 21 st 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No

## LAND ARC/ENVIR ST/GEOG/URB R PL 532 - APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING

3 credits.
Explores planning-related GIS data, applications, analytical tools, and implementation issues. Enroll Info: None
Requisites: GEOG/CIV ENGR/ENVIR ST 377
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

## 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. Practical experience project organization and management including the preparation of project manuals, legal documents, and construction contracts. Enroll Info: None
Requisites: Senior standing and declared in Landscape Architecture undergraduate 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 2020

## LAND ARC/CIV ENGR/ENVIR ST 556 - REMOTE SENSING DIGITAL IMAGE PROCESSING <br> 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. A 5 -week practicum with applications to: agriculture and forestry, geology and soils, water quality, and urban and regional planning. Enroll Info: Civ Engr/Envir St/Forestry 303 or authorization
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Landscape Architecture (BLA) and LAND ARC/

## HORT 263

Course Designation: Breadth - Natural Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Landscape Architecture (BLA), LAND ARC 261 and 321
Course Designation: Breadth - Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (LAND ARC 261 and 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: LAND ARC 354
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## LAND ARC/F\&W ECOL/ZOOLOGY 565 - PRINCIPLES OF LANDSCAPE ECOLOGY

2 credits.
Landscape ecology emphasizes the importance of spatial patterns at broad scales. Concepts and applications are emphasized, especially for seniors and graduate students in applied natural resource fields. The course is also a prerequisite for Zoology/Forest Ecology 665, Advanced Landscape Ecology. Lecture format with discussion. Enroll Info: Botany/ Zoology/Forest 460, or Forest 550, a crse in stats, cons inst
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## LAND ARC 610 - LANDSCAPE ARCHITECTURE SEMINAR

 3 credits.Capstone project proposal development from a regional to site scale. Students make several 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. Enroll Info: None
Requisites: Senior standing and declared in Landscape Architecture undergraduate program
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## LAND ARC 611 - SENIOR CAPSTONE IN LANDSCAPE ARCHITECTURE

 4 credits.Problems in landscape design, planning and management for which students take the initiative in their definition and solution. Provides an opportunity for systhesis of the knowledge, skills, and approaches learned in previous course work. Enroll Info: LAND ARC 610
Requisites: LAND ARC 610 and declared in Landscape Architecture BLA
Course Designation: Gen Ed - Communication Part B
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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; walkand 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No

## LAND ARC 630 - GEODESIGN FOUNDATIONS

3 credits.

This online lecture, discussion and lab course is designed specifically for students enrolled in the Capstone Certificate in Geodesign. Geodesign is the integration of design and planning, the social and economic sciences, the physical and natural sciences, human values and public participation,using geographic information systems (GIS) with the goal of creating a better, more sustainable and resilient future. This course focuses on understanding the history, leaders, trends, and various frameworks of Geodesign. This introduction to Geodesign will cover a broad body of knowledge that includes: historical foundations of Geodesign; critically evaluate Geodesign frameworks; relationship between Geodesign and planning and design processes, including decision-making frameworks; roles and practices of geospatial technology for planning and design; interdisciplinary application of evidence based design using social and natural science research; communication of spatial decisions, data, information, and processes; spatially evaluate public policy and regulation; and values and ethical issues in Geodesign. Enroll Info: Students must be admitted into the Capstone Certificate in Geodesign Program
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No

## LAND ARC 631 - GEODESIGN METHODS

3 credits.
This course focuses on understanding and application of methods and technology used in the Geodesign framework using the following models: representation, process, evaluation, change, impact, and decision. Students write a methods focused, preliminary project proposal. Geodesign methods and technology are vast and continually evolving, but will be limited to industry standards: Esri ArcGIS Desktop, Esri CityEngine, Trimble SketchUp, and various open-source alternatives as needed (i.e. QGIS, Grass, etc). Students will be exposed to and may use, at their own discretion in coordination the instructor, other open-source alternatives on individual assignments when software and methods choices are at the their discretion (see assignment statements for specific requirements). Enroll Info: Students must be admitted into the Capstone Certificate in Geodesign Program
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
LAND ARC 633 - GEOSPATIAL APPROACHES TO CONSERVATION AND ADAPTATION
2 credits.
Students will explore and use applications of GIS particularly related to landscape ecology, environmental analysis, and conservation design. Engaged students will: a. learn/practice how to solve spatial environmental questions; b. proficiently apply design thinking toward landscape conservation and adaptation solutions. Enroll Info: LAND ARC 630 and LAND ARC 631 and admission to the Capstone Certificate in Geodesign
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No

## LAND ARC 634 - GEODESIGN CAPSTONE PROJECT

 3 credits.This capstone course is the culmination of the yearlong Geodesign Certificate Program. It is designed for students to demonstrate the skills and knowledge that they have acquired in the four prerequisite courses by resolving a "real world" geodesign problem. Students will work with their advisors on projects of their own choosing and as agreed upon by their advisors and the program coordinator and director. Enroll Info: LAND ARC 630, LAND ARC 631, LAND ARC 633, and LAND ARC 671 and admission to the Capstone Certificate in Geodesign
Requisites: None
Course Designation: Sustain - Sustainability
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. Enroll Info: None
Requisites: Junior 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: Fall 2020

## 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. Enroll Info: Land Arc 262 or Grad st
Requisites: LAND ARC 211
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: None
Requisites: LAND ARC 560 or (LAND ARC 365 prior to Spring 2019)
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Analysis and interpretation of data; development of a team report. Enroll Info: a crse in ecology a crse in stats, or cons inst 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
LAND ARC 671 - GEODESIGN FOR SUSTAINABILITY AND RESILIENCY 3 credits.

This course explores the Geodesign concepts and analysis methods can 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. Experience with these methods and data resources takes place in weekly laboratory/homework exercises throughout the semester. Enroll Info: LAND ARC 630 and LAND ARC 631 and admission to the Capstone Certificate in Geodesign
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No

## LAND ARC 677 - CULTURAL RESOURCE PRESERVATION AND LANDSCAPE HISTORY <br> 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. The course acquaints students with 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. Students 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. Enroll Info: None
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 2020
LAND ARC 681 - SENIOR HONORS THESIS
2-4 credits.
Enroll Info: Honors program candidacy
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2014
LAND ARC 682 - SENIOR HONORS THESIS
2-4 credits.
Continuation of 681. Enroll Info: Honors program candidacy
LAND ARC 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2019
LAND ARC 691 - SENIOR THESIS
4 credits.
Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2001
LAND ARC 692 - SENIOR THESIS
4 credits.
Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No

## LAND ARC/ENVIR ST/SOIL SCI 695 - APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN NATURAL RESOURCES <br> 3 credits.

Course has four components: 1) Detailed review of GIS concepts; 2) Case studies; 3) GIS implementation methods; 4) Laboratory to provide "handson" GIS experience. Enroll Info: None
Requisites: LAND ARC 211 or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
LAND ARC 699 - SPECIAL PROBLEMS-LANDSCAPE ARCHITECTURE 1-5 credits.

Enroll Info: Sr st and cons inst
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 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Grad st in land arch or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LAND ARC/ANTHRO/ART HIST/DS/HISTORY 764 - DIMENSIONS OF MATERIAL CULTURE <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## LAND ARC 866 - SEMINAR IN NATURAL PLANT COMMUNITY RESTORATION AND MANAGEMENT

1 credit.
Student presentations on topics related to plant community management and restoration. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
LAND ARC/URB R PL 920 - REGIONAL DESIGN WORKSHOP
2-3 credits.

Development and application of a systematic approach to analysis and design at macro- and micro-scales within a regional context. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
LAND ARC 940 - GRADUATE SEMINAR
1-2 credits.
Individual research, group discussion and workshop covering selected problems relating to the environment and landscape architecture. Enroll Info: None
Requisites: 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

## LAND ARC 990 - RESEARCH

1-12 credits.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
LAND ARC 999 - INDEPENDENT STUDIES
1-3 credits.
Opportunity to explore concepts or issues of particular interest to the student. Enroll Info: None
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

## LATIN (CLASSICS) (LATIN)

## LATIN 103 - ELEMENTARY LATIN

4 credits.
Forms and syntax, with simple translation, equiv to a year of high school Latin. Enroll Info: None
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 2020

## LATIN 104 - ELEMENTARY LATIN

4 credits.
Translation of easy prose; analysis of English derivatives. Enroll Info: LATIN 103. Open to Freshmen
Requisites: LATIN 104 requires LATIN 103 as a pre-req
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

## LATIN 203 - INTERMEDIATE LATIN

4 credits.
Brief review of Latin grammar and vocabulary. Extensive reading from several authors. Enroll Info: LATIN 104 or appropriate placement score. Open to Fr
Requisites: None
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

## LATIN 204 - INTRODUCTION TO LATIN LITERATURE

 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. Enroll Info: LATIN 203. Open to Freshmen

## Requisites: None

Course Designation: Breadth - Humanities
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
LATIN 301 - LATIN LITERATURE OF THE ROMAN REPUBLIC 3 credits.

Writers of the Republic studied in a historical and cultural context. Enroll Info: LATIN 204 or appropriate placement score
Requisites: None
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 2020

## 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. Enroll Info: LATIN 301 or cons inst
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: No
Last Taught: Spring 2020

## LATIN 391 - ELEMENTARY INTENSIVE LATIN

4 credits.
An intensive introduction to the grammar and vocabulary of Classical Latin, the language of ancient Rome. In one semester it aims to complete study of two standard semesters of instruction in Elementary Latin. Gain skills in preparation for reading Latin authors in the original. While its focus is primarily on written grammar and translation, it will also touch on aspects of Roman culture, history and literature. Enroll Info: None
Requisites: None
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

## LATIN 392 - LATIN FOR GRADUATE READING KNOWLEDGE II

 3 credits.Continuation of LATIN 391. Enroll Info: LATIN 391 or cons inst
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 2016
LATIN 505 - ELEMENTARY PROSE COMPOSITION
3 credits.

Survey of Latin syntax and idioms. Enroll Info: LATIN 301 and 302 or cons inst
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: Spring 2019
LATIN 515 - VERGIL
3 credits.

Enroll Info: LATIN 301 and 302 or cons inst
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
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. Enroll Info: LATIN 302 or cons inst
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2016
LATIN 520 - ROMAN DRAMA
3 credits.
Enroll Info: LATIN 301 and 302 or cons inst
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## LATIN 521 - ROMAN ELEGY

3 credits.
One or a combination of: Catullus, Tibullus, Propertius, Ovid, later elegiac poets. Enroll Info: LATIN 302 or cons inst
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
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. Enroll Info: LATIN 302 or cons inst
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
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 Lucillius; Horace; Persius, Juvenal;
later satire poets. Enroll Info: LATIN 302 or cons inst
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
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. Enroll
Info: LATIN 302 or cons inst

## 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012

## 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 Augstan historians, (g) historians of the late Empire. Enroll Info: LATIN 302 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018

## LATIN 549 - LATIN PHILOSOPHICAL WRITERS

3 credits.
One of the following: (a) Cicero's philosophical works, (b) Seneca, (c) Latin patristic writers. Enroll Info: LATIN 302 or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
LATIN 559 - LATIN ORATORY
3 credits.
One of the following: (a) Cicero, Orations, (b) Roman rhetoric. Enroll Info: LATIN 302 or cons inst
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
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.
Enroll Info: LATIN 204 or appropriate placement score
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
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.
Enroll Info: None
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
LATIN 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Consent of instuctor
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 2020
LATIN 691 - SENIOR THESIS
3 credits.
Enroll Info: None
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 1999
LATIN 692 - SENIOR THESIS
3 credits.
Enroll Info: None
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 2000
LATIN 699 - DIRECTED STUDY
1-3 credits.
Enroll Info: Jr or Sr st. Graded on a lettered basis; requires cons inst
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 2020
LATIN 801 - GRADUATE SURVEY
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## LATIN 890 - INDIVIDUAL RESEARCH THESIS

1-12 credits.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
LATIN 910 - SEMINAR-POETRY
3 credits.
Enroll Info: None
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.
Enroll Info: None
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. Enroll Info: None
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

## LACIS/AFROAMER/ANTHRO/C\&E SOC/GEOG/HISTORY/POLI SCI/SOC/ SPANISH 260 - LATIN AMERICA: AN INTRODUCTION <br> 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. Enroll Info:

## None

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: Summer 2020
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. Enroll Info: None
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/CHICLA/HISTORY/POLI SCI 355 - LABOR IN THE AMERICAS: US \& MEXICO IN COMPARATIVE \& HISTORICAL PERSPECTIVE <br> 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 1970 s 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. Enroll Info: None 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 2020
LACIS/ANTHRO 361 - ELEMENTARY QUECHUA
4 credits.
Phonology and morphology; concentration on the acquisition of conversational skills; reading of texts of graded difficulty; three hours classroom and one hour lab. Enroll Info: None
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LACIS/ANTHRO 362 - ELEMENTARY QUECHUA

4 credits.
Continuation of 361. Enroll Info: ANTHRO/LACIS 361 or cons inst. Open to Fr
Requisites: None
Course Designation: Frgn Lang-2nd semester language course
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 2020

## 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. Enroll Info: None
Requisites: 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: ANTHRO/
LACIS 363 or cons inst
Requisites: None
Course Designation: Frgn Lang - 4th 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: Spring 2020
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. Students also learn about Maya culture, history, folklore, and language politics. Enroll Info: None
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Students also learn about Maya culture, history, folklore, and language politics. Enroll Info: ANTHRO/LACIS 376. Open to Fr
Requisites: None
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LACIS 440 - TOPICS IN LATIN AMERICAN, CARIBBEAN, AND IBERIAN STUDIES <br> 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. Enroll Info: Jr st or cons inst
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 2020
LACIS 681 - SENIOR HONORS THESIS
3 credits.
Individual study and research for majors writing theses for honors degree. Enroll Info: Senior majors writing honors thesis consent of instuctor
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.
Individual study and research for majors writing theses for honors degree. Enroll Info: LACIS 681. Sr majors writing honors thesis consent of instructor
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.
An independent studies course to allow students at an advanced level to pursue individual projects. Enroll Info: None
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.
An independent studies course to allow students at an advanced level to pursue individual projects. Enroll Info: None
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 2020

## LACIS/A A E/ANTHRO/C\&E SOC/GEOG/HISTORY/POLI SCI/PORTUG/ SOC/SPANISH 982 - INTERDEPARTMENTAL SEMINAR IN THE LATINAMERICAN AREA <br> 1-3 credits.

Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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

## LAW (LAW)

## LAW/ACCT IS 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. Enroll Info: None
Requisites: ACCT I S 100, 300, or LAW 811. Not open to students declared in BUS: Accounting BBA program
Repeatable for Credit: No
Last Taught: Spring 2020
LAW 601 - INTRODUCTION TO AMERICAN LAW 3 credits.

An introduction to the American common law tradition and to the American legal system, especially for foreign law students and foreign and American graduate students. Enroll Info: Admission to MLI prgm or cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Asmission to MLI prgm or cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Junior standing and either SOC 441 or SOC/C\&E SOC 475, or Law student
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 2018

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
LAW 713 - LEGAL PROCESS
3-4 credits
Function, sources, and development of law, focusing upon the administrative, legislative, and judicial processes and their interrelations; law-making institutions in action as they are called upon to handle social problems.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 715 - TORTS I

$3-5$ credits.
A tort is roughly defined as a 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
LAW 733 - TRUSTS AND ESTATES
$3-4$ credits.
Basic probate and nonprobate devices for management and transmission of property in the family context. Includes consideration of Wisconsin's marital (community) property system, federal gift and estate tax issues, and nonproperty considerations in estate planning.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## 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. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 739 - RELIGION AND THE CONSTITUTION

2-3 credits
This course covers the Free Exercise Clause and the Establishment Clause of the First Amendment to the U.S. Constitution. Enroll Info: LAW 731
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: LAW 731
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 741 - BUSINESS ORGANIZATIONS II: PUBLICLY HELD CORPORATIONS <br> 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 742 - TAXATION I

3-5 credits.
Federal income taxation; basic rules, theory and policy.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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). Enroll Info: Adv st
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 747 - PROTECTIVE LABOR LEGISLATION

3 credits.
Legal protection of individual workers against discrimination, physical damage, economic exploitation and insecurity through Fair Employment Practices, Workmen's Compensation, Fair Labor Standards, Unemployment Compensation, Social Security and similar legislation. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## 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 program; excludes LLMI and 4th year Law students
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
LAW 751 - PATENT LAW
2-4 credits.
Survey of the law of industrial property, including the law of patents and trade secrets. Enroll Info: Adv st
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 752 - COPYRIGHT LAW

2-4 credits.
Survey of state and federal laws affecting literary, musical, and artistic property. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info:
Completion of required 1st yr law crses, or cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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 lifethreatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures. Enroll Info: Graduate or Professional standing or acceptance in Capstone Certificate in Consumer Health Advocacy
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

LAW/MED SC-M/NURSING 769 - CONSUMER ISSUES IN HEALTH CARE 1-3 credits.

Explores consumer issues in health care delivery in interdisciplinary discussion-based format. Covers current delivery system, expenditures/ finance, managed care/insurance, barriers to access, reform, and other select topics. Ideal for future healthcare providers and others interested in patients' experiences. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: LAW 733 others as specified by instr
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: LAW 733
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LAW 773 - LAW AND THE ELDERLY

2-3 credits.
This course addresses the issues faced by elderly clients and their families and caregivers in the context of legal, medical, social and regulatory concerns. Enroll Info: LAW 733 or cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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.

Designed to give students a basic understanding of the internal workings of Islamic law at its theoretical roots. This will be done by analyzing the various methodologies that are represented in Islamic legal literature, helping to enable the students to identify modern manifestations of these methodologies in contemporary Muslim discourses. There is additional 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 different from those gained in Legal Writing I.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 811 - ACCOUNTING AND LAW

3 credits.
Principles of accounting for lawyers. Election in the second year preferable, prior to Corporation Law and Taxation. Students with college accounting take the course for credit only with cons inst.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 814 - APPELLATE ADVOCACY I

2-3 credits.
Lectures and discussions in basics of brief writing and oral advocacy.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## LAW 815 - APPELLATE ADVOCACY II

1-3 credits.
Students 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 818 - COMPARATIVE LAW

2-3 credits.
Civil law system, including its Roman Law antecedents, codification movement, and responses to selected current issues. Focus usually on the law of a single polity to encourage the viewing of law in its societal setting.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
LAW 824 - FEDERAL JURISDICTION
3 credits.
Legal problems that arise because our court system derives from both nation and states as separate sources of authority and is administered by federal and state judiciaries; jurisdiction of the federal courts (including questions of venue, process and litigating capacity, jurisdictional amount, and removal jurisdiction); relation of these courts to state courts;
relationship of federal and state law, both as guides to judicial decision and in everyday affairs. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Rights and obligations of compensated sureties sometimes covered.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 nonrecognition 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 829 - JURISPRUDENCE

2-3 credits.
Philosophies of law; surveys of analytical, sociological and ethical approaches to law and legal systems.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
LAW 837 - REGULATED INDUSTRIES
2-3 credits.
Various aspects of regulation--control over price, supply and services-of different industries; public utilities and the transportation industries; interaction between the legislature, administrative agencies, and courts in development of regulatory policy.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## LAW 838 - REAL ESTATE TRANSACTIONS II

2-3 credits.
Law of real estate finance, planning, and development, including tax and organizational aspects. Enroll Info: LAW 732 and LAW 742 or cons inst Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 program; excludes LLMI and 4th year Law students
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
Advanced problems in federal income taxation; difficult, complex problems peculiar to corporations and shareholders--generally, the tax consequences of corporate organization, reorganization, and liquidation, of various kinds of distributions to shareholds, etc.; scope sufficiently narrow to permit thorough and rigorous study of relevant tax concepts and materials.

Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 program; excludes LLMI and 4th year Law students

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
LAW 848 - INTRODUCTION TO ENVIRONMENTAL LAW
3 credits.

Policy, administration and adjudication related to the environmental complex of population, environmental quality and resource development. Common-law doctrine applied and statutory measures adopted by Wisconsin and by the federal government to protect the public interest in resource preservation and management.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## LAW 849 - PRE-TRIAL ADVOCACY

3 credits.
This course teaches students about the lawyering skills on which litigators spend the vast majority of their time; i.e. skills pertinent to the pre-trial phase of a lawsuit. It uses simulation exercises and extensive feedback from experienced practitioners.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW 850 - PROFESSIONAL RESPONSIBILITIES

1-3 credits.
The ethical and professional responsibility of practicing lawyers. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 854 - CLINICAL PROGRAM

1-7 credits.

See description under Special Programs in chapter on Law Curriculum.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
LAW 858 - COLLECTIVE BARGAINING: THE ARBITRATION PROCESS
3 credits.
Legal and economic aspects of current issues in collective bargaining.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework
requirement
Repeatable for Credit: No
Last Taught: Fall 2016

3 credits

Legal and economic aspects of current issues in collective bargaining Enroll Info: None

Requisites: Graduate/professional standing
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
LAW 862 - LEGAL ASSISTANCE TO INSTITUTIONALIZED PERSONS 1-7 credits.

A 'law-in-action' course. Student gains an understanding of institutional programs for convicted criminal offenders and confined mental health patients; interviews 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. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 867 - TAXATION III

2-4 credits.
Survey of advanced issues in the federal income taxation of business and investment entities. Emphasizes problems encountered in common business and investment transactions, and explores practical and ethical solutions to such problems. Enroll Info: LAW 742840
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
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. Enroll Info: LAW 742
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: LAW 742 required; LAW 840 recommended
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LAW 871 - INTERNATIONAL TRADE LAW

3 credits.

Legal institutions affecting international transactions with a focus on U.S. laws and the principal treaties involved. Topics include the international impact of U.S. securities, antitrust and intellectual property laws, various trade laws of the U.S. and other countries, and the effects of treaties.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 program; excludes LLMI and 4th year Law students
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. Enroll Info:
Completion of required 1 st yr law crses
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Students practice counseling of clients in hypothetical cases under the supervision of experienced practitioners. From the students taking the course, a team or teams may be selected for the national Client Counseling Competition.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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.
WILJ is 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. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## LAW 896 - WISCONSIN JOURNAL OF LAW, GENDER, AND SOCIETY

 1-3 creditsA student-published journal devoted to the intersection of law and gender with issues of race, ethnicity, socioeconomic status, and sexual orientation. The journal, established in 1985, is one of the oldest journals in the country focusing exclusively on gender and the law. Student work on the journal may include writing a piece for publication, reviewing submissions from professional authors, or editing student and professional articles.. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 899 - LAW REVIEW

1-3 credits.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 902 - JUVENILE JUSTICE ADMINISTRATION

2-3 credits.
Formal structure and operational characteristics; objectives of the system, its problems with due process, and the roles of the police, lawyers and social workers.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## LAW 904 - SELECTED PROBLEMS IN CONSTITUTIONAL LAW SEMINAR

2-4 credits.
Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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 in some years.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: Cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## LAW 907 - SELECTED PROBLEMS IN PROFESSIONAL RESPONSIBILITY SEMINAR <br> 2-3 credits.

Perspectives on the ethics of professional life, beyond the requirements of professional codes and rules. Topics and approach reflect interests of instructor and students. May be open to non-law students with permission of instructor. Enroll Info: Cons inst (may include prior work in some aspect of professional responsibility)
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2012
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LAW 915 - SELECTED PROBLEMS IN CRIMINAL JUSTICE ADMINISTRATION SEMINAR <br> 2-3 credits.

Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

LAW 918 - SELECTED PROBLEMS IN INTERNATIONAL LAW-SEMINAR 2-3 credits.

Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## LAW 922 - SELECTED PROBLEMS IN JURISPRUDENCE-SEMINAR

2-3 credits.
Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2016

LAW 926 - SELECTED PROBLEMS OF TORT LAW-SEMINAR
2-3 credits.
Contents and format determined by instructor.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
LAW 928 - SELECTED PROBLEMS IN LAND LAW-SEMINAR
2-3 credits.
Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
LAW 932 - SELECTED PROBLEMS OF ADMINISTRATIVE LAW-SEMINAR 2-3 credits.

Topics reflect interests of the instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: Adv st, cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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 program; excludes LLMI and 4th year Law students
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## LAW 940 - LAW AND CONTEMPORARY PROBLEMS

2-3 credits
Relationship of law to current public issues. Topics reflect interests of instructor and students. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## LAW 943 - SELECTED PROBLEMS IN LEGISLATION-SEMINAR

2-3 credits.
Current issues in the drafting and enactment of legislation and in the use of legislation in litigation. Selection of issues reflects the interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2011

## LAW 944 - SELECTED PROBLEMS IN MODERN AMERICAN LEGAL HISTORY-SEMINAR <br> 2-3 credits.

Particular topics, with emphasis on the relation of law to main currents of political, social, and economic thought in the United States.
Requisites: Declared in Law program; excludes LLMI and 4th year Law

## students

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013

## 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 program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2019
LAW 949 - SELECTED PROBLEMS IN CIVIL PROCEDURE-SEMINAR 2-3 credits.

Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013

## LAW 950 - LAWYERING SKILLS COURSE

$0-10$ credits.
Training in skills used when applying the law in general practice. Taught by teaching teams of practicing lawyers, under the supervision of a faculty member, with at least one lawyer for each 20 students. Offered $31 / 2$ hours a day during 10 weeks of the semester, with no classes in this course during the balance of the semester. 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. Each student handles approximately 35 hypothetical legal matters that are likely to be the work of a new lawyer in general practice.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 953 - SELECTED PROBLEMS IN BUSINESS ORGANIZATION- <br> SEMINAR

1-3 credits.
In business planning and business organizations including proprietorships, partnerships, corporations and trusts.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## LAW 954 - CORPORATE FINANCE LAW

3 credits.
This course presents the basics of finance for business lawyers, and the law and legal strategy surrounding the creation of debt instruments.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: None
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
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. Enroll Info: LAW 733, 742, or cons inst
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LAW/ECON 961 - SELECTED PROBLEMS IN TRADE REGULATIONSEMINAR <br> 2-3 credits.

Topics reflect interests of instructor and students. Enroll Info: None 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 977 - SELECTED PROBLEMS IN POLICING SEMINAR

2-3 credits.
Topics reflect interests of instructor and students.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2013

## LAW 980 - AFRICAN LAW

2-3 credits.
Development of the legal systems of English speaking Africa, under the colonial regimes and since independence. Offered as part of the African Studies Program.
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
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 program; excludes LLMI and 4th year Law students
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.

Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## LAW 989 - ENVIRONMENTAL LAW AND PRACTICE

3 credits.
Presents environmental statutes, cases, and regulations, and discusses their implementation. The focus of the course will be both law and practice. It will provide a survey of substantive environmental law and their application in permitting, commercial transactions and enforcement. Enroll Info: Completion of required 1st-yr law crses. LAW 848 recommended
Requisites: Declared in Law program; excludes LLMI and 4th year Law students
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LAW 990 - DIRECTED RESEARCH

1-12 credits.
With consent of faculty supervising the research; scope and subject arranged between student and faculty. Enroll Info: None
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

## LAW 991 - DIRECTED READING

1-3 credits.
Independent readings from a list prepared by instructor. Subject matter determined by agreement between instructor and student. No student may count more than 8 credits of Directed Reading towards satisfaction of the requirements of the J.D. degree. Enroll Info: None
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

## 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. Enroll Info: Open to Fr So only, until end of Fr reg period. Stdts may receive cr for only one of the following: SOC/LEGAL ST 131 or 431
Requisites: Not open to students who have taken SOC 431
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 2020
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Freshmen 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: Fall 2020

## LEGAL ST/HISTORY 261 - AMERICAN LEGAL HISTORY TO 1860

3-4 credits.
This course surveys the development of American law down to the U.S. Civil War. After a review of the English historical background, it examines how law changed in colonial America, culminating in the framing of the U.S. Constitution. It then 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. Enroll Info: Sophomore standing
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: Fall 2020

## LEGAL ST/HISTORY 262 - AMERICAN LEGAL HISTORY, 1860 TO THE

 PRESENT3-4 credits.
This course 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, it examines 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 is on how law interacts with political, social, and cultural change. Enroll Info: Sophomore standing
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 2020
LEGAL ST 400 - TOPICS IN LEGAL STUDIES AND THE SOCIAL SCIENCES 3-4 credits.

This course can be repeated by students, but not with the same content.
Enroll Info: Jr st; prerequisite may vary with topic
Requisites: None
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: Fall 2020

## LEGAL ST 405 - FOUNDATIONS OF FIELD EDUCATION

2 credits.
This course is designed as a preparatory course for an advanced learning opportunity via an extensive, hands-on internship at a community criminal or juvenile justice agency. Enroll Info: Students must be declared in the Criminal Justice Certificate and have completed or be currently enrolled in a course from groups 1-3 of the certificate curriculum 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 2017
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. Enroll Info: Legal St/SOC/ LEGAL ST 131 or Legal St/POLI SCI/LEGAL ST 217., Jr st or inst cons Requisites: None
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 2019
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. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: SOC/LEGAL ST 131, GENS\&WS 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: Fall 2020
LEGAL ST/HISTORY 426 - THE HISTORY OF PUNISHMENT
3-4 credits.
This course examines punishment across a vast range of historical traditions, examining how wrongdoing and punishment have been figured in law, literature, art and philosophy. Through the semester we will examine ancient, medieval and modern traditions. Enroll Info: Junior or Senior standing or consent of instructor
Requisites: None
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 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None

Requisites: C\&E SOC 140, 210, 211, SOC 181, FOLKLORE/AFROAMER/
AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210,
CHICLA 230, POLI SCI/CHICLA 231, HISTORY/CHICLA/GEN\&WS 245,
LEGAL ST/SOC 131, or 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 2020

## LEGAL ST/CHICLA/SOC 443 - IMMIGRATION, CRIME, AND ENFORCEMENT <br> 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. Enroll Info: None
Requisites: C\&E SOC 140, 210, 211, SOC 181, FOLKLORE/AFROAMER/ AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210,
CHICLA 230, POLI SCI/CHICLA 231, HISTORY/CHICLA/GEN\&WS 245, LEGAL ST/SOC 131, or 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 2020
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. Enroll Info: So st
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 2020

## LEGAL ST 450 - TOPICS IN LEGAL STUDIES AND THE HUMANITIES

 3-4 credits.Topics courses will address a variety of issues linking various humanities perspectives to the central themes of law and legal institutions. This course may be repeated by studens, but not with the same content. Enroll Info: Jr st; prerequisite may vary with topic
Requisites: None
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
LEGAL ST/HISTORY 459 - RULE OF LAW: PHILOSOPHICAL AND HISTORICAL MODELS
3-4 credits.
From the perspectives of history and political theory, this course examines the multiple meanings of the idea of the rule of idea, and its uses in American history. We then explore prominent critiques of the rule of law ideal. Enroll Info: A previous law-related course
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: Spring 2013
LEGAL ST/L IS 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. Enroll Info: None
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/HISTORY 476 - MEDIEVAL LAW AND SOCIETY
3 credits.
The course is intended to introduce students to the central historical developments of law and legal institutions in the European middle ages (400-1500). Enroll Info: None
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 2020

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. We will 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. Enroll Info: None
Requisites: Sophomore standing and a 100 - or 200 -level HIST SCI or MED
HIST course; LEGAL ST/HISTORY 261; SOC/LEGAL ST 131; or POLI SCI/ LEGAL ST 217
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
LEGAL ST/HISTORY 502 - LAW AND COLONIALISM
3 credits.
Historical introduction to the role of law in the context of empire, with special emphasis on 19th-20th C British imperialism; explores themes of class, race and gender through fields of law including criminal, property, family, contract and labor law. Enroll Info: Previous law-related course
Requisites: None
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 2013
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. Enroll Info: Previous law-related course
Requisites: None
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
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. Enroll Info: Requisite varies by topic
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: 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. Enroll Info: None
Requisites: Junior standing and either SOC 441 or SOC/C\&E SOC 475, or Law student
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 2018
LEGAL ST/LIS 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. Enroll Info: None
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
LEGAL ST/LIS 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. Enroll Info: None
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 2019
LEGAL ST 681 - SENIOR HONORS THESIS
3-4 credits.
Individual study for majors writing theses for honors degree. Enroll Info:
Sr st, legal studies major, admission to Honors Progm, cons inst
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

## LEGAL ST 682 - SENIOR HONORS THESIS

3-4 credits
Individual study for majors writing theses for honors degree. Enroll Info:
Sr st, legal studies major, admission to Honors Progm, cons inst
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
LEGAL ST 691 - SENIOR THESIS
3 credits.
Individual study for majors writing senior thesis (nonhonors). Enroll Info: Legal studies major, Sr st, cons inst
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
LEGAL ST 692 - SENIOR THESIS
3 credits.
Individual study for majors writing senior thesis (nonhonors). Enroll Info: Legal studies major, Sr st, cons inst
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
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. Enroll Info: SOC/LEGAL ST 131 and Criminal Justice Certificate declaration
Requisites: None
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: Fall 2020
LEGAL ST 699 - DIRECTED STUDY
1-4 credits.
Directed study in legal studies. Enroll Info: None
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 2020

## LIBRARY AND INFORMATION STUDIES (L I S)

## LIS 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. Enroll Info: None
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: Fall 2020

## L I S 202 - INFORMATIONAL DIVIDES AND DIFFERENCES IN A MULTICULTURAL SOCIETY <br> 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. Enroll Info: None
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: Summer 2020
LI 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). Enroll Info: None
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 2020
LI 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. Enroll Info: None
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

## LIS 341 - TOPICS IN INFORMATION STUDIES - TECHNOLOGICAL ASPECTS <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020
LIS 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. Enroll Info: None
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: Fall 2020

## LIS 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. Enroll Info: None
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 2018
LI 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. Enroll Info: None
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
LIS 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. Enroll Info: None
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 2020

## LI 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, audiovisual productions, and digital archival collections. Enroll Info: None
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. Enroll Info: None
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 2020

## L I S 510 - INFORMATION SECURITY AND PRIVACY

3 credits.
Introduction to personal, social, organizational, and basic technical concepts and skills related to the digital privacy, safety, and security of individuals and organizations. Preparation to help individuals and organizations enhance their online privacy, safety, and security. Enroll Info: None
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: Summer 2020

## L I S/NURSING/OCC THER 517 - DIGITAL HEALTH: INFORMATION AND TECHNOLOGIES SUPPORTING CONSUMERS AND PATIENTS <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## LI 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## L I S 603 - RESEARCH AND ASSESSMENT FOR INFORMATION PROFESSIONALS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LIS/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. Enroll Info: None 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 2020
LIS/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.

## Enroll Info: None

Requisites: 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 2020

## LI S/COMP SCI 613 - USER EXPERIENCE DESIGN 3 <br> 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. Enroll Info: None
Requisites: 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: Summer 2020
LI 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. Enroll Info: None
Requisites: 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## LIS/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. Enroll Info: None
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 2020

## LI S/CURRIC 620 - FIELD PROJECT IN LIBRARY AND INFORMATION AGENCIES <br> 3 credits.

Analysis of field experience through seminars, individual conferences, required reading and consultations with cooperating librarians and information specialists. Enrollment limited. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020

## LI S 624 - STORY TELLING AND ORAL LITERATURE

 3 credits.The oral tradition in world literature for children. Techniques of interpretation through story telling; development of story telling programs in library, school and community. Enroll Info: None
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: Summer 2011

## 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.

## Enroll Info: None

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 2020

## LIS 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. Enroll Info: None
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 2020
LI 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. Enroll Info: None
Requisites: LIS 602
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## L I S 635 - REFERENCE AND INFORMATION SERVICE

3 credits.
Theories, principles and practices of reference and information services.

## Enroll Info: None

Requisites: LI S 601 and 602 or concurrent enrollment
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

## L I S 639 - PEDAGOGICAL THEORY AND PRACTICE FOR INFORMATION PROFESSIONALS <br> 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.. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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

## LIS/LEGAL ST 645 - INTELLECTUAL FREEDOM <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## L I S/ART HIST/HISTORY/JOURN 650 - HISTORY OF BOOKS AND PRINT CULTURE IN EUROPE AND NORTH AMERICA <br> 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. Enroll Info: None
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 2020
LIS 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. Enroll Info: None
Requisites: L I S 602
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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

## LI S 653 - GOVERNMENT INFORMATION SOURCES 3 credits.

Issues of United States government information policy. Structure, policies, and procedures of the Depository Library System. Selection, acquisition, and problems of access to government information sources, including electronic formats. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## L I S 658 - PUBLISHING, KNOWLEDGE INSTITUTIONS AND SOCIETY: EREVOLUTIONS?

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. Enroll Info: None
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. Enroll Info: None
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 2020
LI 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. Enroll Info: None
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 2019

## L I S 665 - TOPICS IN RACE AND ETHNICITY IN THE INFORMATION SOCIETY <br> 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. Enroll Info: None 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; intellectualproperty issues; metadata as applied in digital collections; digital collections planning and evaluation; trusted digital repositories; funding of digital collection projects and sustainability. Enroll Info: None
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 2020

## LIS/JOURN 677 - CONCEPTS AND TOOLS FOR DATA ANALYSIS AND VISUALIZATION <br> 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. Enroll Info: None

## 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 2017

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
LI S/E P D 703 - MANAGING DIGITAL INFORMATION 1 credit.

Helps professionals to effectively and ethically protect and organize the information that they collect, create, and manage. It also presents collaboration tools and techniques for information creation and management. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## L I S/COM ARTS 705 - INTRODUCTORY ANALYTICS FOR DECISION MAKING <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: LI S/COM ARTS 705
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## L I S 707 - DATA VISUALIZATION AND COMMUNICATION FOR DECISION MAKING <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## L I S/HISTORY 734 - INTRODUCTION TO ARCHIVES AND RECORDS MANAGEMENT <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Spring 2020

## LI S 765 - ARCHIVES USER SERVICES AND OUTREACH

 3 credits.looks at the theories, principles, and practices involved in making archival material accessible to the public. Particular emphasis is placed on the role that archival description plays in mediating access to archival materials and the public service and public programming components of archival work. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
LIS 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. Enroll Info: None
Requisites: 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 2019
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. Enroll Info: None
Requisites: 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. Enroll Info: None
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. Enroll Info: None
Requisites: LI 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. Enroll Info: None
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. Enroll Info: None
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

## L I S 875 - TOPICS IN INFORMATION PROCESSING AND RETRIEVAL <br> 1-3 credits.

Current issues in technologies for information processing and retrieval in libraries and information agencies. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## LI S 910 - SMR-RESEARCH DESIGN \& METHODOLOGY FOR LIBRARY \& INFORMATION STUDIES <br> 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. Enroll Info: None 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

## 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. Enroll Info: None
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

## L I S 931 - SEMINAR IN INFORMATION POLICY, MANAGEMENT AND INSTITUTIONS <br> 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. Enroll Info: None
Requisites: 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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## L I S 950 - SEMINAR IN LIS FOUNDATIONS: HISTORIES, PHILOSOPHIES AND DEBATES <br> 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. Enroll Info: None
Requisites: 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

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. Enroll Info: None
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
L I S 990 - RESEARCH AND THESIS
1-9 credits.

Dissertation credits. Enroll Info: None
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

## 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. Enroll Info: None
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

## LIFE SCIENCES COMMUNICATION (LSC)

## LSC 1 - COOPERATIVE EDUCATION/CO-OP IN LIFE SCIENCES

 COMMUNICATION1 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. Enroll Info: None

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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

LSC 212 - INTRODUCTION TO SCIENTIFIC COMMUNICATION 3 credits.

Writing effective science digests, proposals, newsletters, and trade magazine articles for agriculture, natural resources, health and sciencerelated topics. Enroll Info: None
Requisites: Satisfied Communications A requirement
Course Designation: Gen Ed-Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 (survey, focus groups, etc.) and of translating data into reports for expert and lay audiences and into effective campaign strategies. Enroll Info: None
Requisites: Satisfied Communications A requirement
Course Designation: Breadth - Social Science
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Satisfied Communications A requirement
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None

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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
LSC 320 - FEATURE WRITING
3 credits
Advanced writing techniques and in-depth article development, emphasizing agriculture, environment, science, and health topics. Enroll Info: None
Requisites: Satisfied Communications A requirement
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2013
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Satisfied Communications A requirement
Course Designation: Gen Ed - Communication Part B
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
LSC 375 - SPECIAL TOPICS
1-4 credits.

Specialized subject matter of current interest to undergraduate students.
Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

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. Enroll Info: None

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. Enroll Info: None
Requisites: Satisfied Communications A requirement or graduate/ professional standing
Course Designation: Gen Ed - Communication Part B
Grad 50\% - Counts toward 50\% graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2018

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 peerreviewed papers, marketing, business and communication journals. Enroll Info: None
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 2020

## LSC 435 - THEORY AND PRACTICE OF INTEGRATED MARKETING COMMUNICATION <br> 3 credits.

Provides practical insight into integrated marketing communication through analysis of contemporary developments in the marketplace together with theoretical background through readings from published scholarly research. It emphasizes information-seeking, oral presentation skills, and is writing-intensive. Enroll Info: None
Requisites: LSC 270 or graduate/professional standing
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## LSC 440 - CONTEMPORARY COMMUNICATION TECHNOLOGIES AND THEIR SOCIAL EFFECTS <br> 3 credits.

Explores the growth of the information industry. Looks at the characteristics and spread of new communication technologies.
Evaluates their social, economic and political effects. Attention is given to rural-urban differences. Enroll Info: None
Requisites: Satisfied Communications A requirement or graduate/ professional standing
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## LSC/AMER IND 444 - NATIVE AMERICAN ENVIRONMENTAL ISSUES AND THE MEDIA <br> 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. Enroll Info: None
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 Sustain - Sustainability
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None Requisites: None
Repeatable for Credit: Yes, for 8 number of completions Last Taught: Spring 2020

## LSC 515 - SOCIAL MARKETING CAMPAIGNS IN SCIENCE, HEALTH AND THE ENVIRONMENT <br> 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. Enroll Info: None
Requisites: Senior standing, declared in Life Sciences Communication, LSC 250 and 251
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020
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. Enroll Info:

## None

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 2020
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. Enroll Info: None
Requisites: LSC 314 or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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

## LSC 625 - RISK COMMUNICATION

3 credits.
Examines risk as a central concept in the communication process through case studies from science, technology, environment, and health. Enroll Info: None
Requisites: Junior standing and (LSC 250 or 251); or graduate/ professional standing
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Senior standing, declared in Life Sciences Communication, LSC 250 and 251
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Spring 2019

LSC 681 - SENIOR HONORS THESIS
2-4 credits.
Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2017
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2018
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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

## 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 massinterpersonal integration. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## LSC/JOURN 811 - CONCEPTUALIZATION AND DESIGN OF MASS COMMUNICATION RESEARCH <br> 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. Enroll Info: None
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. Enroll Info:

## None

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## LSC/COM ARTS/JOURN 831 - PSYCHOLOGY OF ENTERTAINMENT MEDIA <br> 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: 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

## LSC/JOURN 880 - TOPICS IN MASS COMMUNICATION

3 credits.
In-depth investigation of a specific topic in mass communication. Enroll Info: None
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

## LSC/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. Enroll Info: None
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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
LSC 990 - RESEARCH
1-12 credits.
Independent research in preparation of a graduate thesis under supervision of a faculty member. Enroll Info: None
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
LSC 999 - INDEPENDENT RESEARCH
1-3 credits.
Independent research. Enroll Info: None
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

## LINGUISTICS (LINGUIS)

LINGUIS 101 - HUMAN LANGUAGE
3 credits.
Elementary theory and practical work in phonetics, phonology, morphology, and syntax, with attention to formal grammar. Enroll Info: Open to Fr. Stdts may not receive cr for both LINGUIS 101301
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

## LINGUIS/ANTHRO/FOLKLORE/INTL ST 211 - GLOBAL LANGUAGE ISSUES <br> 4 credits.

A series of modules, each showcasing one language and its culture. Each module tackles a major issue about language, such as extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality. Enroll Info: None
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
LINGUIS 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. Enroll Info: Successful completion of or exemption from Com A requirement. Open to Fr.
Requisites: None
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 2011
LINGUIS 237 - LANGUAGE \& IMMIGRATION IN WISCONSIN 3 credits.

Migration from abroad and other parts of North America brought and continues to bring myriad languages and dialects to Wisconsin. How and when did these immigrants and their descendants learn English and when and why did they begin to speak only English? How have immigrants shaped how English is spoken in the state? We will do handson, original research to find answers to these and related questions about immigrant languages and English past and present in Wisconsin. We'll examine social and historical issues and issues of linguistic structure, drawing on local histories, archival data, Census records and audio recordings and there are opportunities to do fieldwork in communities across the state and the region. Enroll Info: None
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 2020
LINGUIS 299 - DIRECTED STUDY
1-4 credits.

## Enroll Info: None

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

## 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. Enroll Info: Open to Fr. Stdts may not receive cr for both LINGUIS 101301
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: Fall 2020
LINGUIS 303 - LANGUAGE, HISTORY, AND SOCIETY
3 credits.
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; language and social identity, geography, power and prestige; language contact; registers; writing systems. Enroll Info: Stdts may not receive cr for both 103303
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: Spring 2018
LINGUIS 306 - GENERAL PHONETICS
3 credits.
Theory of articulatory phonetics; practice in recognition, reproduction, and transcription of speech sounds and features in various languages.
Enroll Info: LINGUIS 101 or 301 or cons inst
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: Fall 2017
LINGUIS 309 - GRAMMATICAL VARIABILITY OF LANGUAGE
3 credits.
Introduction to theories of variation among world languages, focusing on syntactic phenomena. Enroll Info: LINGUIS 101 or 301 or cons inst. Not open to Fr
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: Fall 2020

LINGUIS 310 - PHONOLOGY
3 credits.
Analysis and formal statement of phonological systems; problems and methods of phonological theory. Enroll Info: LINGUIS 101 or 301
Requisites: None
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
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. Enroll Info: LINGUIS 310
Requisites: None
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
LINGUIS 330 - SYNTAX
3 credits.
Grammatical theory; types of elements and processes usable in syntactic description of various sorts. Enroll Info: LINGUIS 101 or 301
Requisites: None
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
LINGUIS 340 - SEMANTICS
3 credits.
Meaning in natural languages, relationship between syntax and semantics, compositional semantics. Enroll Info: LINGUIS 330 or cons inst
Requisites: None
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

## LINGUIS/AMER IND 371 - SURVEY OF NORTH AMERICAN INDIAN LANGUAGES <br> 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. Enroll Info: None 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
LINGUIS 373 - TOPICS IN LINGUISTICS
3 credits.

Topic varies with instructor. May be repeated. Enroll Info: None Requisites: None
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
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.
Enroll Info: LINGUIS 310 or cons inst
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 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. Enroll Info: LINGUIS 310 either 322 or 330, or cons inst
Requisites: None
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

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. Enroll Info: None
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 2019
LINGUIS 481 - JUNIOR HONORS TUTORIAL
1 credit.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Level - Intermediate
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 2019
LINGUIS 482 - JUNIOR HONORS TUTORIAL
1 credit.

## Enroll Info: None

Requisites: Consent of instructor
Course Designation: Level - Intermediate
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 2020
LINGUIS 510 - PHONOLOGICAL THEORIES
3 credits.
Theories of phonology, and advanced phonological description. Enroll Info: None
Requisites: LINGUIS 310
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
LINGUIS 522 - ADVANCED MORPHOLOGY
3 credits.
Advanced morphological theory. Enroll Info: None
Requisites: LINGUIS 322
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 530 - SYNTACTIC THEORIES
3 credits.
Theories of syntax, and syntactic description. The relation of syntax to semantics, and other aspects of linguistic theory. Enroll Info: None
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 2020

LINGUIS 540 - ADVANCED SEMANTICS
3 credits.
Indexicality, reference and quantification, intensionality, and tense. Enroll Info: LINGUIS 340
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 2012
LINGUIS 571 - STRUCTURE OF A LANGUAGE
3 credits.
In-depth study of all components of the grammar of a language. Enroll Info: LINGUIS 310 330, or cons inst

## Requisites: None

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.
Enroll Info: None
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 584 - SENIOR HONORS TUTORIAL
1 credit.
Enroll Info: None
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 2012

LINGUIS 610 - TOPICS IN PHONOLOGICAL THEORY 3 credits.

In-depth examination of a single phonological theory or a single area of recent phonological research. May be repeated for different topics. Enroll Info: LINGUIS 510 or Grad st in linguistics or cons inst

## 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 2017

LINGUIS 681 - HONORS SEMINAR-SENIOR THESIS
3 credits.
Enroll Info: None
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
LINGUIS 682 - HONORS SEMINAR-SENIOR THESIS 3 credits.

Enroll Info: None
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 2018
LINGUIS 699 - INDEPENDENT READING
1-6 credits.
Enroll Info: LS Undergrads need 2.5, Jr or Sr st cons inst
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 2020
LINGUIS 800 - RESEARCH METHODS AND MATERIALS
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## LINGUIS 977 - SEMINAR

2-3 credits.
See Linguistics 976 for course description. Enroll Info: None 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

LINGUIS 978 - SEMINAR
2-3 credits.
See Linguistics 976 for course description. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
LINGUIS 979 - SEMINAR
2-3 credits.
See Linguistics 976 for course description. Enroll Info: None
Requisites: 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
LINGUIS 990 - THESIS
1-12 credits.
Research in connection with the doctoral thesis. Enroll Info: Grad st in linguistics
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
LINGUIS 999 - INDEPENDENT READING
1-12 credits.
Enroll Info: Grad st in linguistics
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

## LITERATURE IN TRANSLATION (LITTRANS)

LITTRANS 201 - SURVEY OF 19TH AND 20TH CENTURY RUSSIAN
LITERATURE IN TRANSLATION I
3 credits.
Pushkin to Tolstoy; reading and lecture in English. Enroll Info: None
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 202 - SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION II <br> 3 credits.

Dostoevsky to the present, reading and lecture in English. Enroll Info: None
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 2020
LITTRANS 203 - SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION I
4 credits.
Pushkin to Tolstoy; reading and lecture in English; 4th hour discussion section for Communication-B credit. Enroll Info: None
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: Fall 2020

## LITTRANS 204 - SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION II

4 credits.
Chekhov to the present; reading and lecture in English; 4th hour discussion section for Communication-B credit. Enroll Info: None
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 2020
LITTRANS/GEN\&WS 205 - WOMEN IN RUSSIAN LITERATURE IN TRANSLATION
3-4 credits.
Enroll Info: None
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 2019

LITTRANS 207 - SLAVIC SCIENCE FICTION THROUGH LITERATURE AND

## FILM

3 credits.
Science Fiction (SF) is typically thought of as an American (or American-British) genre. This course explores the rich tradition of Slavic contributions to SF. We will 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, we will discuss and analyze film adaptations that have, in some cases, become more famous than written texts themselves. Enroll Info: None
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 208 - THE WRITINGS OF VACLAV HAVEL: CRTITIQUE 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. Readings in English. Enroll Info: None

## 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 <br> 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. In past years the syllabus has included 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. Enroll Info: None

## 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 211 - MODERN INDIAN LITERATURES IN TRASLATION 3 credits.

Introduction for intermediate and advanced students to the systematic study of the literatures of India produced since about A.D. 1800, using a selection of poetry, fiction, drama, and/or nonfictional prose in translation from representative literary languages of the subcontinent. Enroll Info: None
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: No
Last Taught: Fall 2014

LITTRANS 213 - LOVE AND SEX IN ITALIAN COMEDY
$3-4$ credits

Through the close reading and discussion of selected major plays, this course explores Italian comedy and dramatic literature across the centuries, from its Roman origins to contemporary examples. Students will 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. Discussion and targeted writing assignments will aim at cultivating in students 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. Enroll Info: None

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

LITTRANS 214 - LITERATURES OF CENTRAL ASIA IN TRANSLATION 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. Enroll Info: None
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: No
Last Taught: Fall 2017

LITTRANS 215 - POLISH LITERATURE IN TRANSLATION: 14TH TO THE MID-19TH CENTURY
3 credits.
The Beginnings, Baroque, Enlightenment and Romanticism. Enroll Info: None

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 2019
LITTRANS 218 - POLISH LITERATURE IN TRANSLATION: LATE 19TH AND 20TH CENTURIES

3 credits.

A survey of the main currents in Polish literature since 1863. Enroll Info: None
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 IN TRANSLATION

3-4 credits.

Enroll Info: So st
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: No
Last Taught: Fall 2020
LITTRANS 221 - GOGOL IN TRANSLATION
3-4 credits.

Enroll Info: So st
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: No
Last Taught: Spring 2020
LITTRANS 222 - DOSTOEVSKY IN TRANSLATION
3-4 credits
Major works, lecture in English. Enroll Info: So st or cons inst
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: No
Last Taught: Fall 2020

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. Enroll Info: None
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 224 - TOLSTOY IN TRANSLATION
3-4 credits.
Major works, lecture in English. Enroll Info: So st or cons inst
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: No
Last Taught: Spring 2019

## LITTRANS 226 - INTRODUCTION TO LUSO-AFRO-BRAZILIAN LITERATURE

3 credits.
Introduction to the cultural and literary practices of the Portuguesespeaking world. Readings include novels, short stories, and poetry from Portugal, Brazil, and Lusophone Africa. All readings and lectures in English. Enroll Info: None
Requisites: None
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
Last Taught: Fall 2020
LITTRANS/CLASSICS/JEWISH/RELIG ST 227 - INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)
4 credits.
Introduction to the literature and literary history of the Old Testament, Apocrypha, Dead Sea Scrolls, Talmud, and Midrashim. Enroll Info: Not open to students that have completed HEBR ST 217
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: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: 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. Japanese language proficiency is not required. Enroll Info: None
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
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. Japanese language ability is not required. Enroll Info: None
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 2018
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. Enroll Info: None
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 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 236 - BASCOM COURSE-IN TRANSLATION
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. Enroll Info: Successful completion of or exemption from Com A requirement. Open to Fr.
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: Fall 2020
LITTRANS 240 - SOVIET LITERATURE IN TRANSLATION
3-4 credits.
Lecture in English. Enroll Info: So st or cons inst
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: 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. Enroll Info: None
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 <br> 3 credits.

Improve skills in written and oral communication by studying, critiquing and presenting on Spanish American literary texts. Acquire knowledge of Spanish America and develop critical thinking skills through the analysis and interpretation of creative, complex and challenging fictions that reflect on the culture and history of the region. Learn about key themes, problems, authors, genres and periods in the history of Spanish American literary practice, as well relevant theoretical debates. Spanish is the second-most widely spoken language in the world and the primary national language of twenty countries. Beginning with the arrival of Spanish colonists, Spanish American literature has a rich and diverse history spanning more than five centuries. Key themes, problems, authors, genres and periods in the history of Spanish American literary practice, as well relevant theoretical debates. Enroll Info: None

## 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 2020

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. Enroll Info: None

## 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 2020

LITTRANS 249 - LITERATURE IN TRANSLATION: NINETEENTHCENTURY FRENCH MASTERPIECES
3 credits.
Enroll Info: So st or cons inst
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: No
Last Taught: Spring 2016

LITTRANS 252 - SPANISH LITERARY MASTERPIECES IN TRANSLATION 3 credits.

Major works of Spanish Peninsular literature in prose, drama and poetry. Readings and instruction will be in English. Enroll Info: Undergraduate career students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special careers)
Requisites: Undergraduate students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special students)
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 2017
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, we will 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, we will 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. We will 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. Enroll Info: None
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

## LITTRANS 254 - IN TRANSLATION: LIT OF MODERN ITALYEXISTENTIALISM, FASCISM, RESISTANCE <br> 3 credits.

Enroll Info: So st or cons inst
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: No
Last Taught: Fall 2020

LITTRANS 255 - LITERATURE IN TRANSLATION: BOCCACCIO'S DECAMERON-THE HUMAN COMEDY

## 3 credits.

Enroll Info: So st or cons inst
Requisites: None
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
Last Taught: Fall 2019
LITTRANS 256 - LIT IN TRANSLATION: IMAGES OF THE INDIVIDUAL IN THE ITALIAN RENAISSANCE
3 credits.
Introduction to the Renaissance concepts of the individual and individualism through major literary texts, including Boccaccio's Decameron, Machiavelli's Prince, and Cellini's Autobiography. Enroll Info: So st
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: No
Last Taught: Fall 2013
LITTRANS/RELIG ST 257 - LITERATURES OF MUSLIM SOCIETIES IN TRANSLATION
3 credits.
Enroll Info: Open to Fr. LCA majors and all Grads register for LCA 357
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: No
Last Taught: Spring 2014
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. Enroll Info: None
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 261 - SURVEY OF CHINESE LITERATURE IN TRANSLATION

 3 credits.A critical introduction to the literature of China throughout the ages. Most representative traditional and modern works of Chinese poetry, fiction and drama. Two semesters may be taken independently. Enroll Info: None
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 2019
LITTRANS 262 - SURVEY OF CHINESE LITERATURE IN TRANSLATION 3 credits

Continuation of 261. Enroll Info: None
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 2020
LITTRANS 263 - SURVEY OF JAPANESE LITERATURE IN TRANSLATION 3 credits.

A historical introduction to the important literary works of Japan. The first semester. the literary tradition before the restoration of 1868; the second semester. the literature of Japan during the last century. These two semesters may be taken independently. Enroll Info: None
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 264 - SURVEY OF JAPANESE LITERATURE IN TRANSLATION

3 credits.

Continuation of 263. Enroll Info: None
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 268 - FRENCH WOMEN WRITERS FROM THE MIDDLE AGES TO THE NINETEENTH CENTURY <br> 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. Enroll Info: None 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 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. Enroll Info: None
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

LITTRANS/GEN\&WS 270 - GERMAN WOMEN WRITERS IN TRANSLATION
3 credits.
Enroll Info: None
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: No
Last Taught: Fall 2019

LITTRANS 271 - IN TRANSLATION:MASTERPIECES OF SCANDINAVIAN
LITERATURE, MIDDLE AGES-1900
3-4 credits.
Enroll Info: Open to Freshmen. 4th credit for Com-B stdts only
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 2019

LITTRANS 272 - FRENCH POP CULTURE
3 credits.
Through the exploration of landmark and popular French (and few international) texts, this course seeks to narrow the perceived gap between low/high art and it contextualizes historically and aesthetically French pop culture (as literature, film, graphic novel, music etc.). Enroll Info: None
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 2016
LITTRANS 274 - IN TRANSLATION: MASTERPIECES OF SCANDINAVIAN LITERATURE-THE 20TH CENTURY
$3-4$ credits

Continuation of 273. Enroll Info: Open to Freshmen. 4th credit for Com-B stdts only
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 2020

LITTRANS 275 - IN TRANSLATION: THE TALES OF HANS CHRISTIAN ANDERSEN

3-4 credits.
Enroll Info: Open to Fr. 4th cr for Com-B stdts only
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/GERMAN 276 - SPECIAL TOPICS IN GERMAN AND WORLD LITERATURE/S
3 credits.
Exploration of diverse world literary traditions, including German. All
readings and lectures in English. Enroll Info: Sophomore standing
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: No
Last Taught: Spring 2020

## LITTRANS 277 - TOPICS IN TWENTIETH-CENTURY GERMAN LITERATURE (IN TRANSLATION) <br> 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. Enroll Info: Not open to stdts who have taken or are taking German 302 or above. Open to Fr
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: 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. Enroll Info: None 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 2020

LITTRANS 301 - MODERN INDONESIAN LITERATURE IN TRANSLATION 3 credits.

Representative novels, short stories and essays from early 20th century to the present are placed in the literary and cultural context of Indonesia.
Enroll Info: So st or cons inst. LCA majors all Grads register for LCA 401
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: No
Last Taught: Fall 2012

## LITTRANS 302 - WHAT IS LIFE? BIOLOGICAL LIFE IN LITERATURE AND

 CULTURE3-4 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.

## Enroll Info: None

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
LITTRANS 303 - SOUTHEAST ASIAN LITERATURE IN TRANSLATION 3 credits.

Introduction to Southeast Asia through modern literature in its cultural and political context, focusing on the mainland (Vietnam and Thailand) in the fall semester and on the islands (Indonesia and the Phillipines) in the spring. Enroll Info: So st or cons inst. LCA majors all Grads register for LCA 403
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: No
Last Taught: Fall 2013

## LITTRANS 304 - SOUTHEAST ASIAN LITERATURE IN TRANSLATION

3 credits.
See Literature in Translation 303. Enroll Info: So st or cons inst. LCA majors all Grads register for LCA 404
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: No
Last Taught: Spring 2013

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. Enroll Info: None
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: No
Last Taught: Spring 2018

## LITTRANS 319 - SCANDINAVIAN CHILDREN'S LITERATURE

3-4 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. Enroll Info: None
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: Fall 2013

## LITTRANS 324 - TOPICS IN SCANDINAVIAN LITERATURE

3-4 credits.
An examination of selected topics in Scandinavian literature designed for students as literature in translation. Enroll Info: Requisite varies by topic
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: No
Last Taught: Spring 2020
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. Enroll Info: At least one intermed-level crse in lit
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 2020

## LITTRANS/JEWISH/RELIG ST 328 - CLASSICAL RABBINIC LITERATURE IN TRANSLATION <br> 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. Enroll Info: None
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: No
Last Taught: Spring 2019

## LITTRANS 329 - 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. Enroll Info: Sophomore standing or consent of instructor
Requisites: Sophomore, junior, or senior standing; or special student classification
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 331 - IN TRANSLATION: SCANDINAVIAN TOPICS IN DEPTH

1-2 credits.
Penetrating study of an important Scandinavian literary or cultural topic.
Content will vary with each offering. Enroll Info: Jr st or cons inst
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 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). Enroll Info: None
Requisites: 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

LITTRANS 334 - IN TRANSLATION: THE ART OF ISAK DINESEN/KAREN BLIXEN
3-4 credits.
Blixen's tales and biographical fiction. Enroll Info: Jr st or cons inst 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: No
Last Taught: Spring 2019
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2018
LITTRANS 337 - IN TRANSLATION: 19TH CENTURY SCANDINAVIAN

## FICTION

3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Fall 2020

LITTRANS 339 - IN TRANSLATION: KIERKEGAARD AND SCANDINAVIAN LITERATURE
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Fall 2012
LITTRANS 340 - CONTEMPORARY SCANDINAVIAN LITERATURE IN
TRANSLATION
3-4 credits.
Twentieth-century literary traditions and experiments, with attention to major movements, genres, and authors. Enroll Info: None
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 345 - IN TRANSLATION: THE SCANDINAVIAN TALE AND BALLAD
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2020
LITTRANS/FOLKLORE/MEDIEVAL 346 - IN TRANSLATION: THE ICELANDIC SAGAS
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2017

LITTRANS/FOLKLORE 347 - IN TRANSLATION: KALEVALA AND FINNISH FOLK-LORE
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2016
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). Enroll Info: Jr st or cons inst
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: 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 at the Intermediate level. Enroll Info: None
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 web-based course comprising 15 week-long units, organized as a virtual journey through Renaissance Italian and French cities. Each unit includes a lecture and readings from main literary texts and cultural documents associated with the city or region. Enroll Info: None
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: 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? Enroll Info: None
Requisites: LITTRANS 215
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/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. Enroll Info: None 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 2020
LITTRANS/JEWISH 367 - ISRAELI FICTION IN TRANSLATION
3-4 credits.
Major writers, trends and themes in Israeli fiction from pre-State period to present. Meets with Hebrew Studies 343. Enroll Info: Open to Fr. 4th credit earned by prosmr meetings research paper
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: No
Last Taught: Fall 2017

## LITTRANS 368 - MODERN JAPANESE FICTION

3 credits.
Intensive study of novels and stories of three or four writers of the present century, such as Soseki, Tanizaki, Kawabata, and Mishima. Translations of high quality are main texts, but students of Japanese are encouraged to read as much as possible in the original. Enroll Info: Not open to Fr
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: No
Last Taught: Fall 2016
LITTRANS 372 - CLASSICAL JAPANESE PROSE IN TRANSLATION
3 credits.
Examination of the major prose genres of Japanese literature to 1868. Primary focus on Heian women writers, including the Tale of Genji, or on major writers and genres of the Edo period. No knowledge of Japanese required. Enroll Info: Jr st or cons inst
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: No
Last Taught: Fall 2013
LITTRANS 373 - TOPICS IN JAPANESE LITERATURE
3 credits.
Traces the evolution of a given idea through the course of Japanese literature. Possible topics include: women in Japanese fiction, effect of Buddhism on Japanese literature, reflections of everyday life in Japanese literature, and visual-verbal narration. Translations of high quality will be the principal texts, but students of Japanese will be encouraged to read as much as possible in the original. Enroll Info: So st or cons inst

## 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 2019
LITTRANS 374 - TOPICS IN KOREAN LITERATURE
3 credits.
Traces the evolution of a given idea through Korean literature. Possible topics: women in Korean fiction, Confucianism on Korean literature, and contemporary literature and film. Texts: English translations, but students of Korean urged to read as much as possible in the original. Enroll Info:
So st or cons inst
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 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. Enroll Info: So st

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: Summer 2020
LITTRANS/THEATRE 423 - IN TRANSLATION: SLAVIC DRAMA IN CONTEXT

3 credits.
Slavic playwrights and the European tradition of theatre and drama. Enroll Info: None
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: 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. We 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, we 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. Enroll Info: None 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

## LITTRANS/SCAND ST 435 - THE SAGAS OF ICELANDERS IN ENGLISH TRANSLATION <br> 3 credits.

The prose narratives of medieval Iceland, taught in English. 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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
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.
Readings in English. Enroll Info: So st
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: No
Last Taught: Fall 2018
LITTRANS 455 - MODERN SERBIAN AND CROATIAN LITERATURE IN
TRANSLATION
3 credits.
Continuation of Slavic 450, from 1919 until the present. Study of major
twentieth-century writers. Readings in English. Enroll Info: So st
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: No
Last Taught: Spring 2018

## LITTRANS/SLAVIC 467 - ADVANCED SPECIAL TOPICS IN SLAVIC LANGUAGES AND LITERATURES <br> 3 credits.

Special topics in Slavic and Central and Eastern European Languages and Literatures at the advanced level. Enroll Info: None
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
LITTRANS 471 - POLISH LITERATURE (IN TRANSLATION), MIDDLE AGES TO 1863
3 credits.
Intensive study of major writers such as Kochanowski, Krasicki, and Mickiewicz. Enroll Info: None
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 2019
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. Readings in English. Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2019

## MANAGEMENT AND HUMAN RESOURCES (M H R)

## M HR 300 - MANAGING ORGANIZATIONS

3 credits.
The management of organizations: strategy, culture, structure, teams, leadership, human resources, entrepreneurship, and change management. Enroll Info: None
Requisites: Freshman, sophomore, or junior standing; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Freshman, sophomore, or junior standing; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
M HR/ENVIR ST 310 - CHALLENGES \& SOLUTIONS IN BUSINESS SUSTAINABILITY
3 credits.
Provides central knowledge and skills to tackle challenges at the intersection of business and sustainability. Study of the failures in market and decision making systems that lead to sustainability challenges, and learn to address these challenges on the policy, organizational, and individual level. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## M H R 320 - NEW VENTURES IN BUSINESS, THE ARTS AND SOCIAL ENTREPRENEURSHIP <br> 3 credits.

Develop capabilities to create new ventures that create value, and critically analyze role of entrepreneurship in society. Activities: Imagine/ design new ventures, identify markets and funding sources, develop founding teams, do scholarly research on impact of entrepreneurship. Enroll Info: None
Requisites: Member of Entrepreneurial Residential Learning Community (ERLC)
Repeatable for Credit: No
Last Taught: Fall 2020

## M H R 321 - SOCIAL ENTREPRENEURSHIP

1 credit.
For the student interested in creating socially-engaged businesses and using entrepreneurial approaches to non-profit ventures. Activities include developing mission statement, assessing social impact, seeking funding from varied sources. Guest lecturers, cases, role playing. Course grounded in management theory. Enroll Info: None
Requisites: Member of Entrepreneurial Residential Learning Community (ERLC)
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Not open to undergraduates in the School of Business or graduate students
Repeatable for Credit: No
Last Taught: Fall 2020
M H R 365 - CONTEMPORARY TOPICS
1-3 credits.
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Spring 2011

## 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. Enroll Info: None
Requisites: Junior standing and (GEN BUS 310), or (ACCT I S 300), or (ACCT I S 100 and 211), or (ACCT I S 100 and ECON/FINANCE 300); or member of Business Exchange program. Not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020

## M HR 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. Enroll Info: None
Requisites: Sophomore standing, M H R 422, and ACCT I S 211; or member of Business Exchange program. Not open to graduate students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Fall 2020

## M HR 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. Enroll Info: None
Requisites: Sophomore standing, not open to graduate students
Repeatable for Credit: No
Last Taught: Spring 2020

## M H R/A A E 540 - INTELLECTUAL PROPERTY RIGHTS, INNOVATION AND TECHNOLOGY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing and (ECON 301 or 311)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## M HR 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. Enroll Info: None
Requisites: Sophomore standing and (M H R 305 or 705); or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## M HR 611 - PERSONNEL STAFFING AND EVALUATION 3 credits.

Designed to help students develop an understanding of personnel staffing. This includes staffing strategy, legal compliance, staffing planning, job analysis, external recruitment, internal recruitment, measurement, external selection, internal selection, employment decision-making, and staffing system management. Enroll Info: None
Requisites: Sophomore standing and (M H R 305 or 705); or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Sophomore standing and (M H R 305 or 705); or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## M HR 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## M HR 628 - NEGOTIATIONS

2-3 credits.
Theory and practice of negotiations. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## M H R/INTEGART 636 - ENTREPRENEURSHIP IN ARTS \& CULTURAL ORGANIZATIONS <br> 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. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## M H R 700 - ORGANIZATIONAL BEHAVIOR

3 credits.
Employee work attitudes and behaviors in organizations. Analysis of how individual, group and organizational characteristics influence employee attitudes, such as satisfaction and alienation, and employee behaviors, such as participation and performance. How managerial policies and practices such as reward systems and leadership influence work attitudes and behaviors. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business
Exchange program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Knowledge of Statistics strongly encouraged such as STAT 301.
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## M H R/ENVIR ST 710 - CHALLENGES \& SOLUTIONS IN BUSINESS SUSTAINABILITY

3 credits.
Provides students with central knowledge and skills to tackle challenges at the intersection of business and sustainability. Students will study the failures in market and decision making systems that lead to sustainability challenges, and learn how to address these challenges on the policy, organizational, and individual level. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info:

## None

Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Knowledge of statistics strongly encouraged such as STAT 301.
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business
Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: 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 2020

## M HR 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: CSCS/M HR 742
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 <br> 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. Enroll Info: None
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 2020

## M H R 747 - IMPACT CONSULTING FOR ARTS-BASED ORGANIZATIONS AND COMMUNITIES II <br> 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. Enroll Info: None
Requisites: M H R 746
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## M H R 765 - CONTEMPORARY TOPICS

1-4 credits.
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## M H R 774 - SEMINAR-ARTS ADMINISTRATION

3 credits.

Continuation of MHR 773. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
M H R 790 - MASTER'S RESEARCH AND THESIS
1-6 credits.
Completion of master's thesis for MBA program. Enroll Info: None
Requisites: Declared in Arts Administration MBA
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## M H R 799 - READING AND RESEARCH-MANAGEMENT

 1-6 credits.Individual work suited to the needs of graduate students. Enroll Info: None
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
M H R 870 - SEMINAR-ADMINISTRATIVE POLICY
3 credits.

Application of management processes and decision theory to the analysis of cases and critical incidents in management. Cases and incidents deal with both administrative or corporate strategy and with supervisory tactics. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
M H R 872 - SEMINAR IN ORGANIZATIONAL BEHAVIOR AND DESIGN 3 credits.

Analysis and discussion of selected topics in organizational behavior and design. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2019

## 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? Enroll Info: None Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2019

## M H R 976 - DOCTORAL RESEARCH SEMINAR IN MANAGEMENT

 2 credits.Continuation of MHR 975. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## M H R 990 - MANAGEMENT INDEPENDENT RESEARCH PHD THESIS

 1-12 credits.Individual work to complete dissertation requirement of Ph.D. program. Enroll Info: None
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
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Sophomore standing and (ECON 101 or 111) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (Sophomore standing and MARKETNG 300) or member of Business Exchange program. Not open to students with credit for CNSR SCI 657
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info:
None
Requisites: Sophomore standing, MARKETNG 300 and (GEN BUS 303 or
306); or member of Business Exchange program

Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## MARKETNG 365 - CONTEMPORARY TOPICS

1-3 credits.
A course for the exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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
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. Enroll Info: None Requisites: MARKETNG 300 or member of Business Exchange program Repeatable for Credit: No Last Taught: Fall 2020

## MARKETNG 415 - MARKETING COMMUNICATIONS

3 credits.
Decision making in the management of communications between the firm and the public. Communications theories, advertising and promotional management. An evaluation of the promotional mix, i.e. personal selling, advertising media, packaging, sales promotion and publicity. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Sophomore standing and (MARKETNG 300 or OTM 300) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info:

## None

Requisites: Sophomore standing, MARKETNG 300, and OTM 300; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Sophomore standing and (MARKETNG 300 or OTM 300) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2018
MARKETNG 425 - MARKETING CHANNELS
3 credits.

The structure and behavior of marketing channels from a managerial frame of reference. Strong emphasis on understanding marketing institutions and agencies and on dissecting behavioral aspects of channel relations--roles of members, use of power, and resolution of conflicts. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## MARKETNG/OTM 427 - ENTERPRISE SYSTEMS AND SUPPLY CHAIN MANAGEMENT

3 credits.
Provides an overview of enterprise systems and supply chain business processes. Introduces students to how enterprise systems are used to manage supply chains and make effective business decisions. Students will use SAP enterprise resource planning software throughout the course. Enroll Info: None
Requisites: Sophomore standing, MARKETNG 300, and OTM 300; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Junior standing and (MARKETNG 300 or OTM 300), or member of 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. Enroll Info: None
Requisites: (MARKETING 300 and sophomore standing) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (MARKETNG 300, 305, and 310) or member of Business Exchange Program
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Sophomore standing, MARKETNG 300 and (GEN BUS 303 or
306); or member of Business Exchange program

Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Sophomore standing, MARKETNG 300, and 310. Not open to graduate students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Senior standing, MARKETNG 300, 305, and 310; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 or 700)
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MARKETNG 710 - MARKETING RESEARCH

3 credits.
An overview of the marketing research process from a methodological perspective. Topics: Research design, data collection procedures, sampling and data analysis. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 or 700)
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MARKETNG 715 - MARKETING COMMUNICATIONS

3 credits.
Decision-making in the management of promotions. An evaluation of promotional mix, communications theories, advertising and promotional management and strategy development. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 or 700)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing and (MARKETNG 300, 700, OTM 300, or 700); or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
MARKETNG/OTM 726 - SEMINAR IN SUPPLY CHAIN MANAGEMENT 3 credits.

Focuses on strategic issues in supply chain management or supply chain philosophy. Supply chain management is a cross-functional discipline that concentrates on the management of goods, services and information among all links in the supply chain. Enroll Info: None
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: Fall 2020

## MARKETNG/OTM 727 - ENTERPRISE SYSTEMS AND SUPPLY CHAIN MANAGEMENT

3 credits.

Provides an overview of enterprise systems and supply chain business processes. Introduces students to how enterprise systems are used to manage supply chains and make effective business decisions. Students will use SAP enterprise resource planning software throughout the course. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MARKETNG/OTM 728 - SUPPLY CHAIN CAPITAL MANAGEMENT

 3 creditsSupply 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. Enroll Info: None
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. Enroll Info: None

Requisites: MARKETNG 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MARKETNG 735 - BRAND STRATEGY

3 credits
Provides students a comprehensive and up-to-date treatment of the subjects of brand, brand equity, and strategic brand management.
It examines the concepts and techniques to improve the long-term performance of brand strategies. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 or 700)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MARKETNG 737 - 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. Enroll Info: None
Requisites: Graduate/professional standing and (MARKETNG 300 or 700); or member of Business Exchange Program

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MARKETNG 745 - 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. Enroll Info: None
Requisites: Graduate/professional standing and (MARKETNG 300 or 700); or member of Business Exchange Program

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

## Repeatable for Credit: No

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. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 or 700)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MARKETNG 765 - CONTEMPORARY TOPICS

1-4 credits

Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
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: Fall 2020

## MARKETNG 770 - MARKETING CONSULTING PRACTICUM

 2-4 creditsApply 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). Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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
MARKETNG 805 - QUALITATIVELY-BASED MARKETING INSIGHTS
3 credits
Understanding and application of in-depth qualitative market research methods, with an emphasis on the interpretation of qualitative data.
Provides hands-o experience with different methodological techniques and immersion in a cultural perspective for systematically analyzing data from a marketing perspective. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 and 310) or (MARKETNG 700 and 710)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## MARKETNG 815 - MARKETING ANALYTICS

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. It is particularly useful to students planning careers in marketing analytics, product management and consulting. It is designed for students with some background in quantitative methods and an exposure to basic marketing research concepts. Enroll Info: None
Requisites: Graduate standing and (MARKETNG 300 and 310) or (MARKETNG 700 and 710)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MARKETNG 840 - CURRENT TOPICS IN MARKETING ANALYTICS \& INSIGHTS <br> 1 credit.

Expose to emerging and current topics in the industry of marketing analytics and insights through applied learning experiences - case studies, industry meetings, and exercises or workshops. Enroll Info: None 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: Fall 2020

## MARKETNG 971 - SEMINAR-MARKETING PHD

3 credits.
Analysis and discussion of recent research in all aspects of marketing thought and practice. Enroll Info: None
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 2019

MARKETNG 972 - SEMINAR-MARKETING PHD
3 credits.

Continuation of MARKETNG 971. Enroll Info: None
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 2020
MARKETNG 990 - MARKETING INDEPENDENT RESEARCH PHD THESIS 1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program. Enroll Info: None

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

## 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. Enroll Info: None
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

## 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. Enroll Info: None Requisites: Sophomore standing
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: (MATH 113, 114, or 171) and (CHEM 103, 109, or 115 or concurrent enrollment)
Repeatable for Credit: No
Last Taught: Fall 2020

## M S \& E 299 - INDEPENDENT STUDY

1-3 credits.

Independent study under faculty supervision. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2020

M S \& E 330 - THERMODYNAMICS OF MATERIALS
4 credits.
Introduction to thermodynamics of materials, equilibrium constants, solutions, heterogeneous equilibria and electrochemistry. Enroll Info: None
Requisites: MATH 222 or 276 and (CHEM 104, 109, or 115), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## M S \& E 332 - MACROPROCESSING OF MATERIALS

3 credits.
Topics include: ironmaking and steelmaking; production of $\mathrm{Cu}, \mathrm{Zn}, \mathrm{Al}$ 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. Enroll Info: None Requisites: M S \& E 350, 351, or CBE 440, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## M S \& E 350 - INTRODUCTION TO MATERIALS SCIENCE

3 credits.
Basic structure and resulting properties, phase equilibria, metastability, rate and growth processes in solids. Enroll Info: None
Requisites: CHEM 103, 109, or 115, or member of Engineering Guest Students. Students with credit for M S \& E 351 may not enroll in M S \& E 350.

Repeatable for Credit: No
Last Taught: Fall 2020

## M S \& E 351 - MATERIALS SCIENCE-STRUCTURE AND PROPERTY RELATIONS IN SOLIDS <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: M S \& E 350, 351, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## M S \& E 360 - MATERIALS LABORATORY I

1 credit.
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## M S \& E 362 - MATERIALS LABORATORY III

2 credits.
Experiments in the mechanical and electronic properties of matter in bulk and thin films; computer instrument control; and data analysis. Enroll Info: None
Requisites: M S \& E 361
Repeatable for Credit: No
Last Taught: Fall 2020

## 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: Thermogravic 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; xray crystal and powder diffraction. Microscopy: scanning electron microscopy (SEM); SEM and energy dispersive analysis (EDS). Enroll Info: None
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Spring 2020

## 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. Enroll Info: None Requisites: M S \& E 350 or 351, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: M S \& E 330, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (M S \& E 330 and 351), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll

## Info: None

Requisites: M S \& E 352 or graduate/professional standing
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: M S \& E 350 or 351, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## M S \& E 456 - ELECTRONIC, OPTICAL, AND MAGNETIC PROPERTIES OF MATERIALS <br> 3 credits.

Quantitative description of electronic, optical, and magnetic structureproperty relationships of materials. Strategies for the development of new materials and introduction to applications of these materials. Enroll Info: None
Requisites: (M S \& E 350 or 351) and (PHYSICS 202, 208, 248, or E C E/PHYSICS 235), graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## M S \& E 460 - INTRODUCTION TO COMPUTATIONAL MATERIALS SCIENCE AND ENGINEERING <br> 3 credits.

An introduction to the theoretical and computational tools for computational materials, with hands on homework and laboratories. Topics include 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.) Enroll Info: None
Requisites: None
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: M S \& E 350 or 352, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: M S \& E 350 or 351, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: M S \& E 352, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: M S \& E 352, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: M S \& E 470
Repeatable for Credit: No
Last Taught: Spring 2020

## 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 nonlinear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

## M S \& E 530 - THERMODYNAMICS OF SOLIDS

3 credits.

Thermodynamics of condensed matters as applied to materials science and engineering. Enroll Info: None
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 2020
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. Enroll Info: None 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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None 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 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: PHYSICS 205, 241, 244, or (M S \& E 351 and 333) or PHYSICS/
ECE 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 2020

## M S \& E 648 - ADVANCED X-RAY SCATTERING METHODS IN MATERIALS SCIENCE AND ENGINEERING <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## M S \& E 699 - INDEPENDENT STUDY

1-4 credits.
Courses in Metallurgical Engineering. Enroll Info: None
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 2020

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. Enroll Info: None
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

M S \& E 748 - STRUCTURAL ANALYSIS OF MATERIALS 3 credits.

Introduction to transmission electron microscopy of materials, including imaging, diffraction, and microanalysis. Enroll Info: 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 2020
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. Enroll Info:
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 <br> TRANSFORMATIONS <br> 3 credits.

Phase transformations, nucleation theory and the role of structural imperfections, alloy phase equilibria, interface reactions and growth kinetics, continuous transformations. Enroll Info: 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: Fall 2017

## M S \& E 756 - STRUCTURE AND PROPERTIES OF ADVANCED ELECTRONIC MATERIALS <br> 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 nextgeneration materials. Enroll Info: 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 2019

## 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. Enroll Info: None
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 2019
M S \& E 760 - MOLECULAR DYNAMICS AND MONTE CARLO
SIMULATIONS IN MATERIALS SCIENCE
3 credits.
Students will learn algorithms and develop codes for molecular dynamics (MD) and Monte Carlo (MC) simulations of materials. Techniques for parallel programming (MPI) will be introduced and practiced. Advanced techniques based on MD and MC will be presented. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## M S \& E 790 - MASTER'S RESEARCH OR THESIS

1-9 credits.
Under faculty supervision. Enroll Info: None
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: Fall 2020
M S \& E 803 - SPECIAL TOPICS IN MATERIALS SCIENCE
1-3 credits.
Topics vary. Enroll Info: None
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 S \& E 890 - PRE-DISSERTATOR'S RESEARCH
1-9 credits.
Under faculty supervision. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 S \& E 990 - RESEARCH AND THESIS
1-9 credits.
Under faculty supervision. Enroll Info: None
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: Fall 2020

## M S \& E 999 - INDEPENDENT WORK

1-3 credits.
Independent study under faculty supervision. Enroll Info: None
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. Enroll Info: None
Requisites: Placement into MATH 96. Department consent required to drop/swap from course
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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: Fall 2020

## MATH 118 - SUMMER COLLEGIATE EXPERIENCE MATHEMATICS COURSE <br> 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. Enroll Info: None
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 130 - MATHEMATICS FOR TEACHING: NUMBERS AND OPERATIONS <br> 3 credits.

Mathematics for teaching focusing on numbers and operations in K-8. Emphasis on understanding a variety of problem solving strategies and word problems. Content will focus on place value, models for the operations, standard and alternative algorithms, fractions, and decimals. Enroll Info: None
Requisites: MATH 96 or placement into MATH 130 and classified as Elementary Education, Pre-Elementary Education or Pre-Special Education. 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 2020

## MATH 131 - MATHEMATICS FOR TEACHING: GEOMETRY AND

 MEASUREMENT3 credits.
Mathematics for teaching focusing on geometry and measurement in K-8. Emphasis on understanding a variety of problem solving strategies and deductive reasoning. Content will focus on geometric shapes and their relationships, transformations, measurement, and the connection to numbers. Enroll Info: None
Requisites: Grade of C in MATH 130 and classified as Elementary
Education, Pre-Elementary Education, or Pre-Special Education
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
MATH 132 - PROBLEM SOLVING IN ALGEBRA, PROBABILITY AND STATISTICS
3 credits.
Algebra, probability, and statistics for teachers of elementary school mathematics. Topics include proportions, relations, functions and their graphs, equally likely outcomes, expected value, and representation of data. The emphasis is on problem solving, modeling, and analysis of solution strategies. Enroll Info: None
Requisites: MATH 130 and 131 with grades of C or better. Open only to students classified as Elementary Education, Pre-Elementary Education, or Pre-Special Education
Course Designation: Gen Ed - Quantitative Reasoning 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

## MATH 135 - ALGEBRAIC REASONING FOR TEACHING MATH

 3 credits.Topics from high school/college algebra relevant to teaching mathematics in middle school, including linear and quadratic equations and inequalities, linear systems, concept of a function, exponential and polynomial functions, with an emphasis on problem solving and modeling. Enroll Info: None
Requisites: Grade of C in MATH 130, and (MATH 112, 114, or 171), and classified in Elementary Education, Pre-Elementary Education, or PreSpecial Education
Course Designation: Gen Ed - Quantitative Reasoning Part B Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
MATH 136 - PRE-CALCULUS AND CALCULUS FOR MIDDLE SCHOOL TEACHERS
6 credits.
Designed to develop future middle school mathematics teachers' knowledge of precalculus and calculus concepts and to make connections between these concepts and middle school mathematics. Enroll Info: None
Requisites: Grade of C in MATH 135 and declared in Elementary Education or special student 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 2015
MATH 138 - MATHEMATICS FOR TEACHING: CONJECTURE, GENERALIZATION, AND PROOF
3 credits.
Explores the roles of conjecture, generalization, and proof in effective teaching of mathematics. Students explore mathematical reasoning as an iterative process of conjecturing, generalizing and investigating. Topics are drawn from counting, probability, statistics, arithmetic, algebra, and geometry. Enroll Info: None
Requisites: Grade of C in MATH 136 and declared in Elementary Education
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: 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: Fall 2020
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. Enroll Info: None

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 2020
MATH 198 - DIRECTED STUDY
1-3 credits.
Directed study projects as arranged with a faculty member. Enroll Info: None
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. Enroll Info: 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. Enroll Info: 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: Fall 2020

## MATH 213 - CALCULUS AND INTRODUCTION TO DIFFERENTIAL EQUATIONS <br> 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: 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 2020

## MATH 221 - CALCULUS AND ANALYTIC GEOMETRY 1

5 credits.
Introduction to differential and integral calculus and plane analytic geometry; applications; transcendental functions. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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: Fall 2020

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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## MATH 275 - TOPICS IN CALCULUS I

5 credits.
Topics in first semester calculus. Enroll Info: 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. Enroll Info: 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: MATH 234 or concurrent enrollment; not open to students with credit for 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: Fall 2020

## 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, or STAT/MATH 431) and (STAT 224, 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: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 222 or 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: Fall 2020
MATH 320 - LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS 3 credits.

Introduction to linear algebra, including matrices, linear transformations, eigenvalues and eigenvectors. Linear systems of differential equations. Numerical aspects of linear problems. Prospective math majors should instead consider MATH 341 for a proof based introductory linear algebra course. Enroll Info: None
Requisites: MATH 222 or 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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## MATH 331 - AN INTRODUCTION TO PROBABILITY AND MARKOV CHAIN MODELS <br> 3 credits.

An overview of basic probability including discrete and continuous random variables, moment generating functions, limit theorems, conditional probability and expectations, random walks, and Markov chains. Enroll Info: None
Requisites: MATH 234 or (MATH 222 and MATH/COMP SCI 240)
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.

Matrix algebra, linear systems of equations, vector spaces, sub-spaces, linear dependence, rank of matrices, determinants, linear transformations, eigenvalues and eigenvectors, diagonalization, inner products and orthogonal vectors, symmetric matrices. Prospective math majors should instead consider MATH 341 for a proof based introductory linear algebra course. Enroll Info: None
Requisites: MATH 222. Not open to students with credit for MATH 341 or 375

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 2020

## MATH 341 - LINEAR ALGEBRA

3 credits.

Emphasizes the understanding of concepts in linear algebra and teaches to write and understand proofs in mathematics in general and in linear algebra in particular. Enroll Info: None
Requisites: MATH 234
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 2020

## MATH 375 - TOPICS IN MULTI-VARIABLE CALCULUS AND LINEAR <br> ALGEBRA <br> 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. Enroll Info: Freshmen students are invited to enroll by the Department of Mathematics.
Requisites: Consent of Instructor
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 2020
MATH 376 - TOPICS IN MULTI-VARIABLE CALCULUS AND
DIFFERENTIAL EQUATIONS
5 credits.
Topics in multi-variable calculus and introduction to differential equations. Enroll Info: None
Requisites: MATH 375
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 2020

## 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 preapproved by the math department. Enroll Info: None
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 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## MATH/COMP SCI/I SY E 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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
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: Fall 2019
MATH 461 - COLLEGE GEOMETRY I
3 credits.
An introduction to Euclidean or non-Euclidean geometry. Enroll Info: None Requisites: MATH 234 or (MATH 222 and 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: Fall 2019
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. Enroll Info: None
Requisites: MATH 234, 375, (222 and 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 2020

## MATH/CURRIC 471 - MATHEMATICS FOR SECONDARY SCHOOL TEACHERS <br> 3 credits.

This is a capstone course for future middle and high school teachers, drawing connections between higher mathematics and school mathematics. Enroll Info: None
Requisites: (MATH 341, 375, or 421) and MATH 461
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
MATH/HIST SCI 473 - HISTORY OF MATHEMATICS
3 credits.
An historical survey of the main lines of mathematical development. Enroll Info: None
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 2020
MATH/COMP SCI/STAT 475 - INTRODUCTION TO COMBINATORICS 3 credits.

Problems of enumeration, distribution, and arrangement. Inclusionexclusion 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. Enroll Info: None
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: Fall 2020
MATH 490 - UNDERGRADUATE SEMINAR
1-3 credits.
Intermediate or upper level topics course in mathematics. Topics vary. Enroll Info: None
Requisites: Consent of instructor
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 2020

## MATH 491 - TOPICS IN UNDERGRADUATE MATHEMATICS

 3 credits.Intermediate or upper level topics course in mathematics. Topics vary. Enroll Info: None
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 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. Enroll Info: None
Requisites: (MATH 340, 341, or 375) and (COMP SCI 200, 300, 301, 302
or 310) 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 2020
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. Enroll Info: None
Requisites: (MATH 320, 340,341 , or 375 ) and (MATH $322,376,421$, or 521) and (COMP SCI 200, 220, 300, 310, or 301 prior to Spring 2020) 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 2020

## MATH 519 - ORDINARY DIFFERENTIAL EQUATIONS

3 credits.
Provides a rigorous introduction to ordinary differential equations and dynamical systems. Enroll Info: 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\&S Credit - Counts 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

## 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.
Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## MATH/COMP SCI/I SY E/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. Enroll Info: None
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: Fall 2020

## 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). Enroll Info: None
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 2020

## MATH 535 - MATHEMATICAL METHODS IN DATA SCIENCE

3 credits.
Provides a rigorous introduction to concepts from different areas of mathematics that play an important role in modern data science. Topics include: matrix factorizations, Gaussian models, optimization theory and algorithms, finite Markov chains, introduction to infinite-dimensional spaces. Mathematical techniques are motivated by and illustrated on a range of applied problems from machine learning and statistics. Enroll Info: None
Requisites: (MATH 320, 340, 341, 375 or M E/COMP SCI/E C E 532) and (STAT/MATH 309, 431, MATH 531, STAT 311 or E C E 331) and (MATH 341, 375, 376, 421, 467, 521); or graduate/professional standing or member of 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: Fall 2020

## 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. Enroll Info: None 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 2020

## MATH 541 - MODERN ALGEBRA

3 credits.
Groups, normal subgroups, Cayley's theorem, rings, ideals, homomorphisms, polynomial rings, abstract vector spaces. Enroll Info: None
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 2020

## MATH 542 - MODERN ALGEBRA

3 credits.
Field extensions, roots of polynomials, splitting fields, simple extensions, linear transformations, matrices, characteristic roots, canonical forms, determinants. Enroll Info: None
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 2020

## MATH 551 - ELEMENTARY TOPOLOGY

3 credits.
Topological spaces, connectedness, compactness, separation axioms, metric spaces. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## MATH 561 - DIFFERENTIAL GEOMETRY

3 credits.
Theory of curves and surfaces by differential methods. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## MATH/PHILOS 571 - MATHEMATICAL LOGIC

3 credits.
Basics of logic and mathematical proofs; propositional logic; first order logic; undecidability. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: (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/B M I/BIOCHEM/BMOLCHEM 606 - MATHEMATICAL METHODS FOR STRUCTURAL BIOLOGY

3 credits.
A rigorous foundation for mathematical modeling of biological structures. Mathematical techniques include ordinary and partial differential equations, 3D Fourier analysis and optimization. Biological applications include protein folding, molecular dynamics, implicit solvent electrostatics, and molecular interactions. Enroll Info: None
Requisites: (MATH 234, 320, 340, or 375) and (COMP SCI 200, 300, 301, 302, or 310) or graduate/professional standing or member of the PreMasters 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 2016
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. Enroll Info: 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 608 - MATHEMATICAL METHODS FOR CONTINUUM MODELING IN BIOLOGY

3 credits.
Provides a rigorous foundation for mathematical modeling of biological systems. The mathematical emphasis is on partial differential equations, particularly reaction-diffusion and transport equations. Biological applications include bacterial chemotaxis, spatio-temporal ecological dynamics, and cell-level reactions. Enroll Info: None
Requisites: MATH 322 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 2012

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Spring 2020

## MATH 621 - ANALYSIS III

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. Course is essential for graduate work in mathematics. Enroll Info: None
Requisites: MATH 522 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 2012

## MATH 623 - COMPLEX ANALYSIS

3 credits.
Elementary functions of a complex variable; conformal mapping; complex integrals; the calculus of residues. Enroll Info: None
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 2020
MATH 627 - INTRODUCTION TO FOURIER ANALYSIS
3 credits.
Fourier series and integrals, and their applications. Enroll Info: None
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 2019
MATH 629 - INTRODUCTION TO MEASURE AND INTEGRATION 3 credits.

Lebesgue integral and measure, abstract measure and integration, differentiation, spaces of integrable functions. Enroll Info: None
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 2020

## MATH/I SY E/OTM/STAT 632 - INTRODUCTION TO STOCHASTIC PROCESSES <br> 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. Enroll Info: None
Requisites: (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: Fall 2020

## MATH/I SY E/OTM 633 - QUEUING THEORY AND STOCHASTIC MODELING <br> 3 credits.

Reliability theory; coherent systems and reliability bounds. Markovian queues and Jackson networks. Steady-state behavior of general service time queues. Priority queues. Approximation methods and algorithms for complex queues. Simulation. Dynamic programming; applications to inventory and queueing. Enroll Info: None
Requisites: STAT/I SY E/MATH/OTM 632
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 2010

## MATH 635 - AN INTRODUCTION TO BROWNIAN MOTION AND STOCHASTIC CALCULUS <br> 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.

## Enroll Info: None

Requisites: (MATH 521 and STAT/I SY E/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 2020

## MATH/E C E 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. Enroll Info: None
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.
Enroll Info: None
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

## MATH 682 - SENIOR HONORS THESIS

3 credits.
Individual study for honors math majors writing a thesis in mathematics. Enroll Info: None
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 2020

## MATH 691 - UNDERGRADUATE THESIS

2-4 credits.
Individual study for students writing a thesis in mathematics. Enroll Info: None
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. Enroll Info: None

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. Enroll Info: None
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 2020
MATH 699 - DIRECTED STUDY
1-6 credits.
Directed study projects as arranged with a faculty member. Enroll Info: None
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 2020

## MATH 703 - METHODS OF APPLIED MATHEMATICS 1

3 credits.

Study of the linear algebraic structure underlying discrete equilibrium problems. Boundary value problems for continous equilibria: SturmLiouville 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. Enroll Info: Knowledge of undergraduate linear algebra, analysis and complex analysis is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 HamiltonJacobi equations. Higher order PDEs: classification, Fourier analysis, wellposedness. 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. Enroll Info: 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## MATH 707 - THEORY OF ELASTICITY

3 credits.
Topics in the theory of elasticity. Contents vary. Enroll Info: None Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: STAT/MATH 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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 2020

## 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, smoothedparticle hydrodynamics) for solving partial differential equations. Applications from science and engineering. Applications from science and engineering. Enroll Info: 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 PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: Knowledge of undergraduate analysis (e.g. the sequence MATH 521 and 522) is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 d-bar equation. Enroll Info: 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 2020
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. Enroll Info: None
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 2020

## 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; quasiNewton 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: STAT/COMP SCI/I SY E/MATH 726
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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 PreMasters 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020
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. Enroll Info: 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 PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MATH 745 - THEORY OF GROUPS

3 credits.
Topics in finite group theory which may include: subnormality, coprime actions, the Schur-Zassenhaus theorem, solvable and nilpotent groups, transfer theory and its applications, and normal p-complement theorems. Occasionally, the focus may be on some aspects of infinite group theory. Enroll Info: Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters 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 2012

## 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. Enroll Info: Basic graduate algebra courses (e.g. MATH 741 and 742 ) are strongly recommended. Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## 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; sl(2)-representations; root systems; Dynkin diagrams; Weyl groups; Cartan and Borel subalgebras; Serre's theorem. Enroll Info: 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 PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014

## 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. Enroll Info: Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Familiarity with undergraduate algebra and topology MATH 541 or 551) is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MATH 753 - ALGEBRAIC TOPOLOGY I

3 credits.
Higher homotopy groups, elements of obstruction theory, fibrations, bundle theory, classifying spaces, applications to smooth mainfolds, differential forms, vector bundles, characteristic classes, cobordism, applications and calculations. Enroll Info: Basic graduate topology courses (e.g. MATH 751 and 752) are strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters 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, intorduction to generalized cohomology theories, spectra, elements of K theory. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info: Familiarity with basic undergraduate analysis courses MATH 521 and 522 or MATH 621) is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MATH 762 - DIFFERENTIAL TOPOLOGY

3 credits.
Introduces the fundamental techniques and theorems of differential topology. The following topics will be covered: Submersions and immersions, Jet bundles, approximation, Sard's theorem, Whitney embedding theorem, transversality, intersection theory, Poincare-Hopf theorem, isotopy, Hopf-degree theorem, Corbodism, Morse theory, classification of two-manifolds. Enroll Info: Familiarity with the topics in a differential manifolds course (e.g. MATH 761) is strongly recommended. Requisites: Graduate/professional standing or member of the PreMasters 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 2010

## 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. Enroll Info: None
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 764 - INTRODUCTION TO ALGEBRAIC GEOMETRY

 3 credits.Continuation of MATH 763. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: Familiarity with the topics in a differential manifolds course (e.g. MATH 761) is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Familiarity with the topics in a basic Foundations course such as MATH 770 is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: Familiarity with the topics in a basic Foundations course such as MATH 770 is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MATH 776 - MODEL THEORY

3 credits.
Review of compactness and some consequences. Quantifier elimination with examples. The omitting types theorem. Categoricity. BaldwinLachlan theory. Strongly minimal and o-minimal theories. Saturated models. Morley's theorem. Enroll Info: Familiarity with the topics in a basic Foundations course such as MATH 770 is strongly recommended.
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MATH/CBE/E C E 777 - NONLINEAR DYNAMICS, BIFURCATIONS AND CHAOS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters Mathematics (Visiting International) Program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, for 2 number of completions

## MATH 801 - TOPICS IN APPLIED MATHEMATICS

3 credits.
Selected topics in applied mathematics, applied analysis or numerical analysis and scientific computing. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2018

## MATH 812 - ADVANCED METHODS OF APPLIED MATHEMATICS

3 credits.
Differential equations; asymptotic methods in complex analysis; problems of matching; integral transforms; integral equations; introduction to spectral theory; calculus of variations; tensor analysis. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2013

MATH 819 - PARTIAL DIFFERENTIAL EQUATIONS
3 credits.
Classical theory of partial differential equations, together with an introduction to the modern theory based on functional analysis. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## MATH 820 - PARTIAL DIFFERENTIAL EQUATIONS

3 credits.
Initial value problems in PDE, beginning with linear parabolic and hyperbolic equations, and continuing with nonlinear initial value problems. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

MATH 821 - ADVANCED TOPICS IN REAL ANALYSIS
3 credits.

Topics in partial differential equations and real analysis. Enroll Info: None Requisites: Graduate/professional standing or member of the PreMasters 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 2020

MATH 823 - ADVANCED TOPICS IN COMPLEX ANALYSIS 3 credits.

Several complex variables. Basic several complex variables or more special topics. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

MATH 825 - SELECTED TOPICS IN FUNCTIONAL ANALYSIS 3 credits.

Topics will vary and may include spectral theory, nonlinear functional analysis or abstract harmonic analysis. Enroll Info: None Requisites: Graduate/professional standing or member of the PreMasters 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 2019

## MATH 826 - ADVANCED TOPICS IN FUNCTIONAL ANALYSIS AND DIFFERENTIAL EQUATIONS

3 credits.

Topics in functional analysis and differential equations. Enroll Info: None Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: None

Requisites: Graduate/professional standing or member of the PreMasters 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 2020

MATH 828 - ADVANCED TOPICS IN HARMONIC ANALYSIS
3 credits.
Continuation of MATH 827. Advanced topics in harmonic analysis. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

MATH/STAT 833 - TOPICS IN THE THEORY OF PROBABILITY 3 credits.

Advanced topics in probability and stochastic processes. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## MATH/COMP SCI 837 - TOPICS IN NUMERICAL ANALYSIS

3 credits.

Advanced topics in numerical analysis relevant to current research at UW. Each offering of the course will cover a topic selected by the instructor. Topics vary and may include fluid dynamics, computational methods, mathematical biology and others. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2011

## MATH/E C E 842 - TOPICS IN APPLIED ALGEBRA

3 credits.
Applied topics with emhasis 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). Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2019

MATH 844 - ARITHMETIC GEOMETRY
3 credits.
An introduction to arithmetic geometry with emphasis on arithmetic of elliptic curves. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2019

## 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, infinitedimensional Lie algebras, Hecke algebras, automorphic forms, Galois representations, zeta and L-functions, abelian varieties. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2017

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 849 - AUTOMORPHIC FORMS

3 credits.
Classical and/or modern theory of automorphic forms. Representation theory of GL(2). Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2018

## MATH 851 - TOPICS IN GEOMETRIC TOPOLOGY

3 credits.
Advanced Topics in Geometric Topology. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 853 - TOPICS IN ALGEBRAIC TOPOLOGY

3 credits.
Topics in Algebraic Topology. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2016
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. Enroll Info: None Requisites: Graduate/professional standing or member of the PreMasters 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 2017

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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2019

## MATH 867 - ANALYTIC NUMBER THEORY

3 credits.
Prime number theory, prime number theory for arithmetic progressions, additive number theory, density theorems. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020
MATH 921 - SEMINAR IN ANALYSIS
1-3 credits.
Selected topics in Analysis. Enroll Info: None
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 2020
MATH 941 - SEMINAR-ALGEBRA
1-3 credits.
Selected topics in Algebra. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020
MATH 951 - SEMINAR IN TOPOLOGY
1-3 credits.
Selected topics in Topology. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## MATH 967 - SEMINAR IN NUMBER THEORY

1-3 credits
Selected topics in Number Theory. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

MATH 975 - SEMINAR-THE FOUNDATIONS OF MATHEMATICS 1-3 credits

Selected topics in Mathematical Logic. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2015

MATH 990 - READING AND RESEARCH
1-3 credits.

Reading and research in all areas of Mathematics. Enroll Info: None 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

## 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. Enroll Info: None Requisites: Sophomore standing
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## M E 151 - INTRODUCTION TO MECHANICAL ENGINEERING

 2 credits.Introduction to the field of Mechanical Engineering through problemsolving in the context of small group projects. Fabricate, build, and test prototypes. Introduction to computer software of particular relevance to Mechanical Engineers. Enroll Info: None
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. Enroll Info: None

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Oobtain 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. Enroll Info: None
Requisites: Declared in Biomedical, Biological Systems, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical, or Nuclear Engineering, Materials Science and Engineering, Engineering Physics, or Engineering Mechanics
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Biomedical, Biological Systems, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical or Nuclear Engineering, Materials Science and Engin, Engineering Physics, Engineering Mechanics or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: EMA 201, MATH 222
Requisites: E M A 201 and (MATH 222 or 276), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 222 or 276, or member of Engineering Guest Students Repeatable for Credit: No
Last Taught: Fall 2020

## M E 291 - UNGERGRADUATE MECHANICAL ENGINEERING PROJECTS

 1-3 credits.Individual lab projects under staff supervision. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## M E 299 - INDEPENDENT STUDY

1-3 credits
Directed study projects as arranged with instructor. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
Requisites: (M E 306, E M A 303 or concurrent enrollment) or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: M E 313 and (M E 340 or concurrent enrollment)
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 computeraided analysis of structural, thermal and other physical properties. Enroll Info: None
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, or 310), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## M E 346 - INTRODUCTION TO FEEDBACK CONTROL FOR MECHANICAL ENGINEERS <br> 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. Enroll Info: None
Requisites: M E 340, E M A 545, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Mechanical Engineering with senior standing and M E 331
Repeatable for Credit: No
Last Taught: Fall 2020
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). Enroll Info: None
Requisites: Senior standing and M E 351
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (CHEM 103 or 109) and E M A 201, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: M E 361 and (MATH 319, 320 or 375), or member of
Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## M E 364 - ELEMENTARY HEAT TRANSFER

3 credits.
Fundamental concepts of conduction, convection, radiation. Heatexchanger principles. Enroll Info: None
Requisites: M E 361 and (M E 363 or concurrent enrollment), or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: M E 363 and (M E 364 or concurrent enrollment) and (M E 368 or concurrent enrollment)
Repeatable for Credit: No
Last Taught: Fall 2020

## M E 379 - MECHANICAL DISSECTION

1 credit.
Laboratory examination of the design of pumps, turbines, engines, heatexchangers, household appliances, and other mechanical equipment. Operational design materials, manufacturing, failure and marketing considerations. Enroll Info: None
Requisites: Declared in Mechanical Engineering with senior standing, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2013
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2017
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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: STAT 240, 301, 302, 312, 324, 371, or 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: Fall 2020

## M E/CBE/CHEM/E M A 425 - UNDERGRADUATE RHEOLOGY SEMINAR

 $0-1$ credits.Rheology seminar encouraged for all interested in professions related to polymers, suspensions or rheology. Enroll Info: None
Requisites: Junior or senior standing only, 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: Fall 2011

## M E 429 - METAL CUTTING

3 credits.
Theory and applications of metal cutting; basic principles; significant features of current research. Chip formation mechanics, threedimensional machining operations, tool life and machinability, economics of metal removal, and precision engineering. Enroll Info: None 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 2020

## 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.

## Enroll Info: None

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 2020

## 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. Enroll Info: None Requisites: Senior standing or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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.

## Enroll Info: None

Requisites: (M E 306 or E M A 303) and (M E 340 or E M A/M E 540), or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Summer 2020

## M E/BSE/FOOD SCI 441 - RHEOLOGY OF FOODS AND BIOMATERIALS

 3 credits.Fundamentals of rheology and rheological evaluations of food and biomaterials; structure-function relationships. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
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 2020

## 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.
Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: M E 340, 346, or 446, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 thermomechanical 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. Enroll Info: None
Requisites: Senior standing and (M E 306 or E M A 303), M E 313, 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 2020

## M E 450 - DESIGN AND DYNAMICS OF VEHICLES

3 credits.
Dynamic modelling of vehicles, tire mechanics, suspension kinematics, vehicle stability, vehicle structural design criteria, vehicle vibrations and ride criteria, design considerations for vehicles. Enroll Info: None
Requisites: Senior standing and M E 340, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2014

## 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. Enroll Info: None
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: Fall 2014
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. Enroll Info: None
Requisites: COMP SCI 200, 220, 300, 301, 302, or 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 2020

## M E 460 - APPLIED THERMAL / STRUCTURAL FINITE ELEMENT ANALYSIS <br> 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. Enroll Info: None 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 2020

## M E 461 - THERMAL SYSTEMS MODELING

3 credits.
Analysis and design of engineering systems involving applications of thermodynamics, economics, heat transfer, and fluid flow. Enroll Info:

## None

Requisites: M E 364 or concurrent enrollment, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## M E 489 - HONORS IN RESEARCH

1-3 credits.
Undergraduate honors research projects supervised by faculty members.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
M E 491 - MECHANICAL ENGINEERING PROJECTS I
1-3 credits.
Individual lab projects under staff supervision. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

M E 492 - MECHANICAL ENGINEERING PROJECTS II
1-3 credits.
Continuation of M E 491. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (B M E 315, M E 240 or E M A 202) or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None Requisites: I SY E 315, (I SY E 323 or 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 2020
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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or 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 2020
M E/I SY E 513 - ANALYSIS OF CAPITAL INVESTMENTS
3 credits.
A second course in quantitative methods for analyzing capital investments in technological environments, both public and private. Replacement models; comparison of alternative investment models; risk analysis; case studies. Enroll Info: None
Requisites: I SY E 313 , (I SY E 323 or E C E/COMP SCI/I SY E 524) and (STAT/MATH 309, STAT 311, STAT 224, STAT 324 or 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 2012

## M E 514 - ADDITIVE MANUFACTURING

3 credits.
Rapid prototyping (RP) has emerged as a popular manufacturing technology to accelerate product creation. This novel manufacturing technology enables the building of parts that have traditionally been impossible to fabricate because of their complex shapes and the variety in materials. Enroll Info: None
Requisites: Senior standing and M E 313, or graduate/professional standing, or 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 2019

## 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. Enroll Info: None Requisites: M E 361 and (M E 364 or B M E/CBE 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: Fall 2019
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: nonNewtonian viscosity, linear viscoelasticity, normal stresses, recoil, stress relaxation, etc. Dimensional analysis. Unit operations of the polymer industry: extrusion, blow molding, injection molding, mixing. Enroll Info: None
Requisites: M E 363, B M E/CBE 320, member of Engineering Guest
Students, or graduate/professional standing
Repeatable for Credit: No
Last Taught: Spring 2015

## 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. Enroll Info: None
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.

Introduction to machine learning that focuses on matrix methods and features real-world applications ranging 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. Enroll Info: None Requisites: (MATH 222 or 276) and (E C E 203, COMP SCI 200, 220, 300, $301,302,310$, or 320 ), or 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: Fall 2020

## 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. Enroll Info: None
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 2019
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 mapdeep 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. Enroll Info:

## None

Requisites: COMP SCI 200, 220,300,301, 302, or 310 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: Fall 2020

## M E/E M A 540 - EXPERIMENTAL VIBRATION AND DYNAMIC SYSTEM ANALYSIS <br> 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. Enroll Info: None
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 2020
M E 545 - FLUID POWER
3 credits.
Generation, transmission, and utilization of power in systems in which the working fluid is oil or air; analysis and evaluation of pumps, motors, valves, and other fluid components; dynamic analysis and control of fluid power systems. Enroll Info: None
Requisites: Senior standing 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: Spring 2012

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
M E 564 - HEAT TRANSFER
3 credits.

Applications of conduction, convection, and thermal-radiation principles to combined-mode problems; analytical and numerical techniques; heatexchanger design; thermal stresses. Enroll Info: None
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/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. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: (M E 361 or PHYSICS 415) and (B M E/CBE 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. Enroll Info: None
Requisites: (M E 364, CBE 326, or concurrent enrollment), or graduate/ professional standing, or member of Engineering Guest Students
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2020

## 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 devises. Wave phenomena and engine port tuning. Physics of high temperature gases and equilibrium, non-equilibrium and frozen flows. Enroll Info: None
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 2017

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
Requisites: Senior standing or member of Engineering Guest Students
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2019

## 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. Enroll Info: None
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 2020

## M E/I SY E 641 - DESIGN AND ANALYSIS OF MANUFACTURING SYSTEMS <br> 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. Enroll Info: None
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 2020

## M E/I SY E 643 - PERFORMANCE ANALYSIS OF MANUFACTURING SYSTEMS <br> 3 credits.

Examines the state of the art in the use of stochastic network theory to develop performance models of modern manufacturing systems. Enroll Info: None
Requisites: (I SY E 624 or STAT/I SY E/MATH/OTM 632) and
(COMP SCI 200, 220, 300, 301, 302, or 400), 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 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: 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 2019
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. Enroll Info: 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. Enroll Info: 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 714 - ADVANCED MATERIALS PROCESSING AND MANUFACTURING

 3 credits.Discusses the systematic integration of processing-materialperformance relationships in various advanced materials processing and manufacturing processes. Enroll Info: Knowledge of manufacturing processes [such as M E 313] required.
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: 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. Enroll
Info: 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 2020

## 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. Enroll Info: 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 - ADVANCED ROBOTICS

3 credits.
In-depth study of robotics modeling and control. Topics include kinematics, motion planning, dynamics and control of serial chain robotic manipulators. Concepts are explored through a combination of theoretical and numerical modeling techniques. Knowledge of highlevel computational programming language such as MATLAB strongly encouraged. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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 2016

## 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. Enroll Info: None
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 2020

## M E 747 - ADVANCED COMPUTER CONTROL OF MACHINES AND PROCESSES <br> 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. Enroll Info: 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: Spring 2020

## M E 748 - OPTIMUM DESIGN OF MECHANICAL ELEMENTS AND SYSTEMS <br> 3 credits.

Formulation and solution of mechanical design problems by use of mathematical programming methods. Enroll Info: None
Requisites: M E 548 and graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
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. Enroll Info: 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. Enroll Info:
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: Fall 2020

## 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. Enroll Info: 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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020

## 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. Enroll Info: 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 2020

## 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. Enroll Info: 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: Fall 2020
M E 765 - ADVANCED HEAT TRANSFER II-CONVECTION
3 credits.
Convection and mass-transfer principles, including boundary-layer phenomena in laminar and turbulent flow; internal flows; heat transfer in high-velocity flow, numerical methods. Enroll Info: Knowledge of fluid mechanics [such as M E 363] and heat transfer [such as M E 364] strongly encouraged.
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## 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. Enroll Info: 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 2019

## M E 770 - ADVANCED EXPERIMENTAL INSTRUMENTATION

 3 credits.Theory and design of instruments for transient physical phenomena especially related to internal combustion engines. Enroll Info: 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: Fall 2016

## 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. Enroll Info: 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 2020

## 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 Engineers. Enroll Info: Knowledge of fluid mechanics [such as M E 363 or CBE/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: Fall 2018

## 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. Enroll Info: Knowledge of fluid mechanics [such as M E 363 or B M E/CBE 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 790 - MASTER'S RESEARCH AND THESIS

1-9 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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: Fall 2020

## M E 890 - PHD RESEARCH AND THESIS

1-9 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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: Fall 2020

M E 903 - GRADUATE SEMINAR
0 credits.
Topics vary. Enroll Info: None
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 E/CBE/CHEM/E M A 925 - RHEOLOGY RESEARCH SEMINAR 0-1 credits.

Exploration of the most recent research literature on viscoelasticity, constitutive equations, non-Newtonian flow systems, fluid metering devices, kinetic theory of macromolecules, and rheooptical phenomena. Periodic reports on recent advances made by research workers in the various rheology groups on the Madison campus. Enroll Info: None 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 2011

M E 964 - SPECIAL ADVANCED TOPICS IN MECHANICAL ENGINEERING 1-3 credits.

Advanced topics in design, manufacturing, energy, etc. Enroll Info: None 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 E 990 - DISSERTATOR RESEARCH AND THESIS
1-9 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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: Fall 2020

## M E 999 - ADVANCED INDEPENDENT STUDY

1-5 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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

## MEDICAL GENETICS (MD GENET)

## MD GENET/GENETICS/ZOOLOGY 562 - HUMAN CYTOGENETICS

2 credits.
Fundamental principles of cytogenetics and special problems of human cytogenetics. Enroll Info: None
Requisites: GENETICS 466, 468, BIOCORE 587, or declared in Master of Genetic Counselor Studies 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
Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
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 2020

## MD GENET/BIOCHEM/GENETICS 620 - EUKARYOTIC MOLECULAR BIOLOGY <br> 3 credits

Focuses on the basic molecular mechanisms that regulate DNA, RNA, and protein metabolism in eukaryotic organisms. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (Junior standing and 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 2020

## 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. Enroll Info: None
Requisites: GENETICS 466, 467 or BIOCORE 383
Repeatable for Credit: No
Last Taught: Fall 2020

## MD GENET/GENETICS 677 - ADVANCED TOPICS IN GENETICS

1-3 credits.
Contents vary; consideration of subjects not included in the curriculum. Enroll Info: None
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: Fall 2020

## MD GENET 699 - INDEPENDENT READING

1-3 credits.

Directed study projects as arranged with instructor. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Declared in Genetics graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## MD GENET 911 - MODERN CLINICAL GENETICS: HOW TO APPROACH A RAPIDLY CHANGING FIELD <br> 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. Enroll Info: None
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 2020
MD GENET 990 - RESEARCH
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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 2013

## MD GENET 993 - SEMINAR IN GENETICS

0-1 credits.
Various aspects of genetics: Drosophila, maize, immunogenetics, developmental genetics, or other special topics. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013
MD GENET 999 - INDEPENDENT WORK
1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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 <br> (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? In this course, we examine 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. Enroll Info: None
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 212 - BODIES, DISEASES, AND HEALERS: AN INTRODUCTION TO THE HISTORY OF MEDICINE <br> 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.. Enroll Info: Open to Freshmen. For honors credit consent required in Hist Sci/Hist Med 284 or consent of instructor 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: Summer 2020

## MED HIST/ENVIR ST 213 - GLOBAL ENVIRONMENTAL HEALTH: AN INTERDISCIPLINARY INTRODUCTION <br> 3 credits.

The course 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## MED HIST/HIST SCI 218 - HISTORY OF TWENTIETH CENTURY AMERICAN MEDICINE

3 credits.
This undergraduate lecture course introduces students to the development of the modern American medical care system. Enroll Info: None
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.

This interdisciplinary course will provide students with analytical tools for the critical examination of the social, cultural, political and economic determinants of health conditions and medical practice. We will pay 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. The course will make emphasis on the important role that conditions of structural violence and inequality play as determinants of health conditions in a globalized world. Enroll Info: None
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/AFROAMER/HIST SCI 275 - SCIENCE, MEDICINE, AND RACE:

## A HISTORY

3 credits.
Surveys the medical and scientific constructions of categories of race, placing the development of racial theories in a broad social and political context. The course will pay particular attention to the importance of racial science in slavery and colonialism. Enroll Info: None
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 2018

MED HIST/HIST SCI 284 - PHYSICIAN IN HISTORY (HONORS) 1 credit.

Honors course for students enrolled concurrently for honors in History of Science 212. Open to non-honors students with consent of instructor. Enroll Info: Con reg for honors in Hist Sci/ Hist Med 212 or cons inst.

## Open to Fr

Requisites: Declared in 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: 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. Enroll Info: None
Requisites: Declared in 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

3-4 credits.
Science, medicine and religion from antiquity to the present, with emphasis on Western civilization. Enroll Info: None
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.
Survey of major developments in biology and related sciences ca. 1700-1950. Topics include morphology and embryology; evolutionary theory, ecology, and genetics; physiology and recent experimental biology. Enroll Info: Jr st or cons inst
Requisites: None
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
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. Enroll Info: Jr st or cons inst
Requisites: None
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/HIST SCI/HISTORY 504 - SOCIETY AND HEALTH CARE IN AMERICAN HISTORY <br> 3 credits.

Lecture-seminar. Health care in America since the colonial period; emphasis on social developments. Enroll Info: None
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## 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). The first third of the class explores key issues in U.S. health policy and forms the empirical foundation for the rest of the class. The second third explores ongoing debates in moral and political philosophy over putative entitlements to health and health care. The last third 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. Enroll Info: None
Requisites: Junior standing or Senior standing or Graduate standing required.
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. Enroll

## Info: None

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. Enroll Info: None
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 <br> 3 credits.

Seminar. Health problems in the U.S. from the colonial period to the twentieth century; efforts made toward their solutions. Enroll Info: None
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 2017

## MED HIST/ENVIR ST/HIST SCI 513 - ENVIRONMENT AND HEALTH IN GLOBAL PERSPECTIVE <br> 3 credits.

Explores the historical relationships between environmental change and human health from the 17th through the 20th century. Topics include colonialism and disease, medical geography, urban pollution and reform, workplace hazards, environmental risk, and the anti-toxics and environmental justice movements. Enroll Info: Jr st
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Issues discussed can include: the use of coercive or intrusive public health interventions that restrict individual freedom, infringe upon individual privacy, and/or invite individual harm (or risks of harm); the justification of patemalistic measures in societies or sub-populations that seemingly indulge in pleasurable yet unhealthy behaviors; the extent to which societies should hold individuals responsible for their health conditions; the need to decide who receives life-saving treatment or vaccination when not all can; the need to choose between the identifiable victims we can save with expensive measures here and now and the more numerous unidentifiable victims we could save in the future with the same monetary investment; the trade-offs between maximizing aggregate health benefits and addressing the special needs of vulnerable social sub-groups and individuals; climate changes and intergenerational justice; ethical issues in international pharmaceutical research, and the need to establish reasonable limits to public health demands in a world where health outcomes are profoundly influenced by policies in other domains (such as transportation, housing, unemployment, and education) that generate their own ethical problems and imperatives. Enroll Info: None
Requisites: Junior standing or Senior standing or Graduate standing required.
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 2019

## MED HIST/AFROAMER/HIST SCI 523 - RACE, AMERICAN MEDICINE AND PUBLIC HEALTH

3 credits.
The course will provide historical perspectives on current dilemmas facing black patients and health care professionals. Enroll Info: Jr or Sr st Requisites: None
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 nonexperts 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. Enroll Info: None
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 2020
MED HIST 526 - MEDICAL TECHNOLOGY AND THE BODY 3 credits.

Ethical and cultural dimensions of chemical, surgical and biological therapeutics and enhancements to the human body. Explores bodyaltering technologies within cultural understandings of appearance, function, perception and identity. Enroll Info: None
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 2016

## 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. Enroll Info: None
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 2019

## MED HIST/GEN\&WS/HIST SCI 532 - THE HISTORY OF THE (AMERICAN) <br> BODY <br> 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. Enroll Info: None
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 2018
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. Designed for upper-level undergraduates and graduate students. Enroll Info: None
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 2020
MED HIST/HIST SCI/HISTORY 543 - DOCTORS AND DELUSIONS: MADNESS AND MEDICINE IN THE MODERN ERA
3 credits.
Medical approaches to mental illness from 1750 to the present. Emphasis on how tension between biomedical and socio-environmental theories about psychopathology have marked modern psychiatry. Focus on Europe and the United States with global and comparative dimensions. Enroll Info: None
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 2011

## MED HIST 545 - ETHICAL AND REGULATORY ISSUES IN CLINICAL INVESTIGATION <br> 1 credit.

This course will explore and examine the ethical issues central to clinical research, regulations governing clinical investigation, and the role of good clinical practice for clinical trials. Enroll Info: None

## 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 2020

## MED HIST/HIST SCI 550 - MEDICAL TECHNOLOGIES IN HISTORICAL

 PERSPECTIVE3 credits.
Focusing upon the 18th- to 21 st-century U. S. and building upon earlier European history, the course explores the ways that a range of technologies-e.g. stethoscopes, spirometers, $x$-rays, hospital design, pharmaceuticals, gene and cell therapies, telemedicine, etc. - have shaped medicine and invited social critique. Enroll Info: None
Requisites: Junior or 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 2015

## MED HIST/HIST SCI/POP HLTH 553 - INTERNATIONAL HEALTH AND GLOBAL SOCIETY <br> 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. Enroll Info: None
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 2019
MED HIST/HIST SCI 554 - A HISTORY OF WESTERN DISABILITY 3 credits.

Offers a wide range of arguments about the nature of disability, from prehistory to the 21 st century. Explores the history of disability in Western thought and practice and the formulation of personhood, citizenship, and social well being. Enroll Info: None
Requisites: None
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## 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. Enroll Info: None
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 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. Enroll Info: Consent of instructor; enrollment may be limited depending on topic and approach
Requisites: None
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 2020

## MED HIST/CLASSICS/HIST SCI/HISTORY/S\&A PHM 561 - GREEK AND ROMAN MEDICINE AND PHARMACY

3 credits.

Greek and Roman medicine and drug lore from the Pre-Socratics to Oribasius (c. 600 B.C. - A.D. 350), including the backgrounds of ancient Egyptian and Mesopotamian medicine. Enroll Info: None
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 2015

## MED HIST/HIST SCI/HISTORY/MEDIEVAL/S\&A PHM 562 - BYZANTINE MEDICINE AND PHARMACY

3 credits.

Byzantine and Islamic medicine and drug lore from Oribasius to the beginnings of the Italian Renaissance (c. 350 - c. 1400 A.D.). Enroll Info: None

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: Spring 2015

## MED HIST/HIST SCI/HISTORY 564 - DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN 3 credits.

This course 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. Enroll Info: None

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

## MED HIST/AGRONOMY/C\&E SOC/PHILOS 565 - THE ETHICS OF MODERN BIOTECHNOLOGY

3-4 credits.

Study of ethical issues arising from the application of modern biotechnology to microorganisms, crops, and non-human animals. Readings cover moral theory, technology studies, political philosophy, the science used in biotechnology, and current regulations governing its use. Enroll Info: None

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: No
Last Taught: Fall 2020

## MED HIST/ENGL/HIST SCI 599 - DIRECTED STUDY IN HEALTH AND THE HUMANITIES <br> 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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

MED HIST/HIST SCI 668 - TOPICS IN HISTORY OF MEDICINE 3 credits.

Upper-level special topics course in the history of medicine. Enroll Info: None
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
MED HIST 699 - INDEPENDENT STUDY IN MEDICAL HISTORY
1-3 credits.

Enroll Info: Jr st cons inst
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 2020

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. Enroll Info: Grad st con reg in MED HIST/HIST SCI/HISTORY 508
Requisites: Graduate/professional standing
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. Enroll Info:
Grad st con reg in MED HIST/HIST SCI 509
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Fall 2017

## MED HIST/ENVIR ST/HIST SCI 713 - STUDIES IN ENVIRONMENT AND HEALTH <br> 1 credit.

Advanced readings in primary and secondary literature of environment and health, with emphasis on current historiographic issues. Enroll Info:
Grad st, or con reg in Hist Med 513 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2016

MED HIST 720 - HISTORICAL PERSPECTIVES IN MEDICINE 1 credit.
(Med I elective) Lecture-seminar. Contemporary medical issues in a historical context. Enroll Info: Open to 1 st yr Med stdts in their 2nd sem Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
MED HIST 726 - MEDICAL TECHNOLOGY AND THE BODY
1 credit.
Ethical and cultural dimensions of chemical, surgical and biological therapeutics and enhancements to the human body. Explores bodyaltering technologies within cultural understandings of appearance, function, perception and identity. Enroll Info: Grad st con reg in MED HIST 526 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
MED HIST 728 - BIOMEDICAL ETHICS AND SOCIETY 1-3 credits.

Social science perspectives on medicine with emphasis on biomedical ethics. Overview of the qualitative research methods of ethnography, life history, content, visual and narrative analysis. Enroll Info: Grad st. One of the following: ANTHRO 365, Soc 531, Pop Hlth 780 or equivs, or cons inst Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
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.
Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
MED HIST 734 - GRADUATE STUDIES IN MEDICAL ETHICS
1-3 credits.
Enroll Info: None
Requisites: 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. Enroll Info: None
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: Fall 2019

## 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. Enroll Info: None
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: Fall 2020

## 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 costcontainment, and rationing. Hone the craft of constructing ethical arguments, and foreseeing and responding to potential objections. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812, and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## MED HIST/HIST SCI 743 - DOCTORS AND DELUSIONS: MADNESS AND MEDICINE IN THE MODERN ERA <br> 1 credit.

Advanced readings in primary and secondary literature of the history of psychiatry, with emphasis on historiographical issues. Enroll Info: Grad st con reg in MED HIST/HIST SCI/HISTORY 543, or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## 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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812 and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
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 2020

## 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; crosscultural healing; mental and maternal health; growth of international health organizations. Enroll Info: Grad st con reg in MED HIST/HIST SCI/ POP HLTH 553
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## MED HIST 890 - READING AND RESEARCH

1-3 credits.
Enroll Info: Open to all 4th yr Med stdts (8 or 16 wks) Grad stdts of all other depts ( 16 wks )
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
MED HIST/HIST SCI 915 - SEMINAR: SCIENCE IN AMERICA
3 credits.

## Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
MED HIST/HIST SCI 919 - GRADUATE STUDIES IN MEDICAL HISTORY 3 credits.

Three seminars analyzing the scientific and social aspects of the development of modern medicine in Europe and America; one seminar exclusively on public health. Enroll Info: None
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.
Enroll Info: Grad stdts who have the Masters or equiv, or Postdoc fellows who wish to undertake an indep res project
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

## 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. Enroll Info: None
Requisites: (BIOCORE 381 and 382) or (ZOOLOGY/BIOLOGY 101 and 102) or 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 2020

## M M \& I 302 - MEDICAL MICROBIOLOGY LABORATORY

3 credits
Covers procedures and aseptic techniques for isolation and identification of pathogenic microorganisms (bacteria, fungi, and viruses). Enroll Info: None
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 2014
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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 OR 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 2020

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, or 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 2020
M M \& I 410 - MEDICAL MYCOLOGY
2 credits.
Pathogenesis, molecular biology, host-parasite interactions, immunology, epidemiology, and diagnosis of systemic, subcutaneous, and superficial fungal infections. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Spring 2015
M M \& I 460 - TECHNIQUES IN DNA SCIENCE FOR MICROBIOLOGISTS 3 credits.

Introduction to recombinant DNA techniques commonly used in prokaryotic research and clinical Microbiology laboratories. Topics include DNA isolation, agarose gel electrophoresis, restriction enzyme digestion of DNA, ligation, transformation, Southern blotting and PCR. Enroll Info: None
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: Summer 2013

## 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. Enroll Info: None
Requisites: (CHEM 104 or CHEM 109) and (ZOOLOGY/BIOLOGY 101, 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 2020

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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY/BOTANY 152, 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 2020
M M \& I 555 - VACCINES: PRACTICAL ISSUES FOR A GLOBAL SOCIETY 3 credits.

Considers innovative approaches to the development and use of vaccines in the past, today and in the future, including the public health impact and the economic, ethical and safety issues associated with vaccine development, licensing and use. Enroll Info: None
Requisites: M M \& I 341, 528, 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
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. Enroll Info: None
Requisites: (BIOCORE 381 and 382), 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 2020

## M M \& I/POP HLTH 603 - CLINICAL AND PUBLIC HEALTH

 MICROBIOLOGY5 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. Enroll Info: None
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 <br> 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. Enroll Info: Graduate or professional standing 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 2020
M M \& I 677 - ADVANCED TOPICS IN MEDICAL MICROBIOLOGY
1-3 credits.
Specialized topics of current interest in medical microbiology. Enroll Info: None
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 2020
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.
Enroll Info: None
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. Enroll Info: None
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

## 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. Enroll Info: None
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: Spring 2019

## 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. Enroll Info: None
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 2020
M M \& I 704 - INFECTIOUS DISEASES OF HUMAN BEINGS
3 credits.
Pathogenesis, clinical descriptions, and prevention. Enroll Info: None
Requisites: MICROBIO 101 or MICROBIO 303; not open to students declared in Medical Microbiology and Immunology program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (PL PATH/ONCOLOGY 640 or PATH-BIO 513), M M \& I/PATHBIO/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 2020

## M M \& I/MED SC-M 755 - FOUNDATIONS OF MEDICINE 2

3 credits.
Addresses the basic principles of medical microbiology and the infectious diseases involving the cardiovascular, respiratory, renal and dermatologic systems and related any-microbial therapies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
M M \& I/PATH-BIO 773 - EUKARYOTIC MICROBIAL PATHOGENESIS 3 credits.

An advanced course focusing on the molecular, cellular and biochemical mechanisms found in fungal and protozoan pathogens of humans. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
M M \& I/PATH-BIO 790 - IMMUNOLOGY OF INFECTIOUS DISEASE 3 credits.

Immunobiology and immunogenetics of resistance to infectious disease agents of man and animals; immunoregulatory mechanisms associated with evasion of host immunity. Enroll Info: M M \& I/PATH-BIO 720 and 740 required prior to enrollment.
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

M M \& I 900 - JOURNAL CLUB
1 credit.
Student-led discussions of current literature. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
M M \& I 901 - SEMINAR
1 credit.
Seminar series led by MMI faculty members. Enroll Info: None
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 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 disease 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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812, and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 firstauthored papers in peer-reviewed papers. Enroll Info: None
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

## MEDICAL PHYSICS (MED PHYS)

MED PHYS/PHYSICS 265 - INTRODUCTION TO MEDICAL PHYSICS 2 credits.

Primarily for premeds and other students in the medical and biological sciences. Applications of physics to medicine and medical instrumentation. Topics: biomechanics, sound and hearing, pressure and motion of fluids, heat and temperature, electricity and magnetism in the body, optics and the eye, biological effects of light, use of ionizing radiation in diagnosis and therapy, radiation safety, medical instrumentation. Two lectures with demonstrations per week. Enroll Info: None
Requisites: PHYSICS 104, 202, or 208
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or (PHYSICS 202 or 208 and ZOOLOGY/BIOLOGY/BOTANY 152 or 153)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: N E 305 and (N E 405, N E 408, PHYSICS/B M E/H ONCOL/ MED PHYS 501 or 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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or (E C E 330 or MED PHYS/ B M E 573)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MED PHYS/B M E 535 - INTRODUCTION TO ENERGY-TISSUE INTERACTIONS <br> 3 credits.

Explore physical interactions between thermal, electromagnetic and acoustic energies and biological tissues with emphasis on therapeutic medical applications. Enroll Info: None
Requisites: PHYSICS 202, 208, 248, or 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 2017

## MED PHYS/I SY E 559 - PATIENT SAFETY AND ERROR REDUCTION IN HEALTHCARE <br> 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. Enroll Info: None
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/PHYSICS 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. Enroll Info: None
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.
lonizing 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. Enroll Info: None
Requisites: 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 2020
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. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
MED PHYS 571 - ADVANCED EXTERNAL RADIATION ONCOLOGY

## PHYSICS

3 credits.
Physics of ionizing radiation therapy with emphasis on external beam dosimetry and treatment planning. Enroll Info: None
Requisites: MED PHYS/B M E 566
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2011

## MED PHYS 572 - 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. Enroll Info: None
Requisites: MED PHYS/B M E 566
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## MED PHYS/B M E 573 - MEDICAL IMAGE SCIENCE: MATHEMATICAL AND CONCEPTUAL FOUNDATIONS <br> 3 credits.

The conceptual and mathematical foundations of medical imaging, including both deterministic and stochastic aspects. Enroll Info: None
Requisites: MATH 234, 319 and (PHYSICS 202 or 208) or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
MED PHYS/B M E 574 - IMAGING IN MEDICINE: APPLICATIONS 3 credits.

Builds on the fundamental conceptual and mathematical foundations addressed in MED PHYS/B M E 573, with application of concepts to practical medical imaging problems and emerging quantitative imaging techniques. Enroll Info: None
Requisites: MED PHYS/B M E 573
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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. Enroll Info: None
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 2017

## 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. Enroll Info: None
Requisites: PHYSICS/B M E/H ONCOL/MED PHYS 501 and MED PHYS/ BME 573
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: PHYSICS 104, 202, 208, or 248 or 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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: PHYSICS/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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: MED PHYS/B M E 567 and MED PHYS/B M E 568
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll

## Info: None

Requisites: MED PHYS/B M E 575
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
MED PHYS 671 - SELECTED TOPICS IN MEDICAL PHYSICS 1-4 credits.

In-depth examination of current and newly discovered modalities and/or phenomenons in medical physics. Critical reading of literature, hands-on lab work and exploration of medical issues related to discoveries will be included. Enroll Info: None
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
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. Enroll Info: None
Requisites: 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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED PHYS 705 - WOMEN AND LEADERSHIP. SCIENCE, HEALTH AND ENGINEERING <br> 3 credits.

Multiple professional and scientific groups have identified the underrepresentation and lack of advancement of women in academia as a national workforce problem. This course will review evolving perspectives of leadership and how unconscious assumptions about the behaviors and traits of men, women, and leaders impede women's advancement. The course will emphasize 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. The course also provides the opportunity to apply evidence-based perspectives using experiential methods. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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). Enroll Info: None
Requisites: MED PHYS/B M E 568
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED PHYS 719 - MULTI-MODALITY MOLECULAR IMAGING IN LIVING SUBJECTS <br> 3 credits.

Provides an overview of all major areas in molecular imaging, based on each imaging modality. Additional topics include, but are not limited to, role of molecular imaging in stem cell research, molecular imaging with nanoparticles, theranostics, molecular imaging in drug development, optical imaging and its clinical applications, reporter gene imaging, imaging of apoptosis, PET imaging of cancer, imaging protein-protein interactions. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

## 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. Enroll Info: 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: Spring 2020

## 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. Enroll Info:

## None

Requisites: MED PHYS/B M E 566
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## MED PHYS/B M E/PHYSICS 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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED PHYS 780 - PHARMACOKINETIC MODELING IN BIOMEDICAL IMAGING <br> 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). Enroll Info: None
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. Enroll Info: None
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
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. Enroll Info: None
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

## MEDICAL SCIENGES - MEDICAL SCHOOL (MED SC-M)

## MED SC-M 699 - DIRECTED STUDY

1-9 credits.
Enroll Info: Open only to Med stdts
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 2018
MED SC-M 703 - INTEGRATED HEMATOLOGY SYSTEM
3 credits.
Integrated hematology pathophysiology integrated with pharmacology, nutrition, and pathology. Enroll Info: Open to Grad stdts by cons inst coordinator
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

MED SC-M 706 - INTEGRATED CARDIOVASCULAR SYSTEM 4 credits.

Cardiovascular pathophysiology integrated with pharmacology, nutrition, pathology, public health and ethics. Enroll Info: Open to Grad stdts by cons inst coordinator
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
MED SC-M 707 - INTEGRATED GASTROINTESTINAL \& HEPATIC
SYSTEMS
3 credits.
Combines pathophysiology, pathology, pharmacology, neoplasia and nutrition. Enroll Info: Open to Grad stdts by cons inst and coordinator Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## MED SC-M 709 - INTEGRATED RENAL SYSTEM

3 credits.

Integrated renal pathophysiology integrated with pharmacology, nutrition, pathology, public health and ethics. Enroll Info: Open to Grad stdts by cons inst and coordinator
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
MED SC-M 711 - INTEGRATED ENDOCRINOLOGY AND REPRODUCTIVE

## HEALTH

3 credits.
Combines pathophysiology, pathology, pharmacology, neoplasia and nutrition. Enroll Info: Open to Grad stdts by cons inst and coordinator
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
MED SC-M 715 - INTEGRATED RESPIRATORY SYSTEM
4 credits.
Respiratory pathophysiology integrated with pharmacology, nutrition, pathology, public health and ethics. Enroll Info: Open to Grad students by cons inst and coordinator
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

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. Enroll Info:
None
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 724 - INTEGRATED DERMATOLOGY
1 credit.
Addresses the anatomy and function of the skin and offers an overview of diseases that impact the skin. Enroll Info: Standing as med 1 student Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
MED SC-M 728 - INTEGRATED MUSCULOSKELETAL SYSTEM
2 credits.
Provides an understanding of the musculoskeletal system's function and response to injury and disease. Enroll Info: Standing as a year 2 medical student (completion of year 1 medical school curriculum)
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 729 - INTEGRATED NEUROSCIENCES

3 credits.
Describes the normal and abnormal function of the nervous system, including changes in cognition, emotion and behavior. Enroll Info:
Standing as a year 2 medical student (completion of year 1 medical school curriculum)
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 731 - MEDICAL NEUROANATOMY

3 credits.
multidisciplinary basic science of medicine course that covers the development, structure, and function of the nervous system with the purpose of preparing future physicians to understand and diagnose common neurological syndromes. The course covers general principles of the development, connectivity, and blood supply of the central and peripheral nervous system. Course sessions will cover both regions and functions of the nervous system. Enroll Info: Open to Graduate students and by consent of instructor
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 733 - COMPLEMENTARY MEDICINE: IMPLICATIONS FOR CLINICAL PRACTICE
1 credit.
This elective course will cover 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. Enroll Info: 1st or 2nd yr Med st
Requisites: Declared in Doctor of 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.

This course is offered for health science students with beginning or intermediate Spanish proficiency who want to acquire medical interviewing, physical examination and cultural competency skills to enhance their ability to provide care for Spanish-speaking patients and their families. Enroll Info: Med, nursing, pharm, vet med stdts who have had prev Spanish lang instruction
Requisites: Declared in Doctor of Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-M 740 - OVERVIEW OF RURAL HEALTH

1 credit.
This elective course will introduce students to key concepts of rural medicine and especially of rural Wisconsin. Enroll Info: Health professional or related program enrollment with course director permission
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MED SC-M 747 - PERSUASION: THE ART OF EFFECTIVELY CONVEYING HEALTH INFORMATION <br> 1 credit.

Effectively presenting knowledge is an important skill in the health sciences, both to those in our fields as well as those in other arenas. Learn how to write clear, engaging, and visually striking slides conveying medical information as well as interact well with those slides. 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. This course combines discussion with professionally fulfilling presentations by the participants to try out their skills and receive valuable, supportive feedback from their colleagues. This course ties in deeply with those in health sciences community engagement and advocacy training "threads" and is essential for anyone looking to influence population health. Become an effective and engaging presenter through this course! Enroll Info: Currently enrolled in a health professions program (MD, PA, PT, RN, Pharmacy, Genetic Counseling, MPH, OT)
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 751 - FOUNDATIONS OF MEDICINE 1

3 credits.
Basic concepts in several disciplines that underlie the practice of medicine. Themes include cellular injury, tissue repair, inflammation, neoplasia, pharmacodynamcis, drug disposition, peripheral nervous system pharmacology, life cycle nutrition and basic concepts regarding obesity. Enroll Info: Standing as med 2 student (completion of year 1 Medical School curriculum)
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
MED SC-M/M M \& I 755 - FOUNDATIONS OF MEDICINE 2
3 credits.
Addresses the basic principles of medical microbiology and the infectious diseases involving the cardiovascular, respiratory, renal and dermatologic systems and related any-microbial therapies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## MED SC-M 757 - FOUNDATIONS OF MEDICINE 3

3 credits.
Addresses the basic principles of virology and parasitology and the infectious diseases involving the gastrointestinal, musculoskeletal and central nervous systems and related antimicrobial therapies. Enroll Info: Med Micro 701
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
MED SC-M 759 - FOUNDATIONS OF MEDICINE 4
1 credit.
Addresses several advanced concepts in medicine through themes that incorporate multisystem perspectives. Enroll Info: Standing as a year 2 med student (completion of year 1 medical school curriculum)
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 lifethreatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures. Enroll Info: Graduate or Professional standing or acceptance in Capstone Certificate in Consumer Health Advocacy
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 SC-M/LAW/NURSING 769 - CONSUMER ISSUES IN HEALTH CARE 1-3 credits.

Explores consumer issues in health care delivery in interdisciplinary discussion-based format. Covers current delivery system, expenditures/ finance, managed care/insurance, barriers to access, reform, and other select topics. Ideal for future healthcare providers and others interested in patients' experiences. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

MED SC-M 770 - PATIENTS, PROFESSIONALISM AND PUBLIC HEALTH 4 credits.

Introduces students to the concepts of health and disease, which vary from patient to patient and through time. This includes 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 historytaking, and core communication skills. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
MED SC-M 772 - FOOD, FASTING \& FITNESS
9 credits.
Food, Fasting and Fitness is 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. It also integrates developmental content from Threads including Communication, Patient Care, Ethics, Health Information Technology, Public Health, Professionalism, Quality Improvement, Patient Safety and Scientific Inquiry. Enroll Info: None
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 773 - HUMAN FAMILY TREE

8 credits.
The course content 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. It 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. In addition, there is significant content from other competency domains such as public health, advocacy, ethics, patient care/communication and clinical skills. Enroll Info: None
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 774 - INVADERS AND DEFENSE

9 credits.
An integrated examination of how the immune system interacts with foreign microbes, the normal micro biome, and self tissues, both normal and malignant. It 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. It covers the development of adaptive immune responses from vaccination, infectious processes, and organ transplantation. It covers the basic biology and pathophysiology of "invaders" of the human body, including viruses, fungi, and bacteria, along with their clinical diagnosis and therapy. Lastly, the course addresses malignant transformation of the immune effector cells themselves, including cancers of mature lymphoid cells and bone marrow derived malignancies. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
MED SC-M 775 - MIND \& MOTION
10 credits.
Mind Motion is a 10-week course that introduces students 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. There is regular integration of these topics with their pathologic and pathophysiologic counterparts. In addition, there will be integration of content related to other curricular domains, or "threads", that include Patient Care Communication, Evidence Based Medicine, Health Information Technology, Quality Improvement Patient Safety, Professionalism, Scientific Inquiry and Public Health. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

MED SC-M 800 - PATIENT, DOCTOR AND SOCIETY 1
3 credits.
First year first semester students spend one half-day every other week in a clinical setting with a primary care physician. In each clinical session, the student will accompany the physician in seeing as many patients as feasible and appropriate. Learning activities for each clinic session will focus on a clinical skill as well as various features of primary care. Enroll Info: 1st yr Med st
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: Fall 2015

## MED SC-M 801 - PATIENT, DOCTOR AND SOCIETY 2

3 credits.

A second semester first year course which covers the basic topic areas of (1) medical ethics and the systems issues in health care, (2) the patient and family, (3) the impact of illness, and (4) the doctor-patient relationship. Enroll Info: None
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 806 - PATIENT, DOCTOR AND SOCIETY 3

3 credits.

In large groups, small groups, and visits to primary care clinics, students will continue to acquire clinical knowledge and skills pertaining to taking histories, performing physical examinations, interpreting medical literature, considering ethical dilemmas, and understanding the US health care system. Enroll Info: Med Sci-M 800, 804
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
MED SC-M 807 - PATIENT, DOCTOR AND SOCIETY 4
3 credits.
In large groups, small groups, and visits to primary care clinics, students will continue to acquire clinical knowledge and skills pertaining to taking histories, performing physical examinations, interpreting medical literature, considering ethical dilemmas, and understanding the US health care system. Enroll Info: Med Sci-M 800, 804, 806
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

MED SC-M 810 - CARE ACROSS THE LIFE CYCLE
12 credits.
Promotes the student's development of clinical knowledge and skills necessary to care for patients and populations across the lifespan. Students will gain practical experience in a variety of inpatient and outpatient settings including pediatrics, obstetrics and geriatrics. There is regular integration of clinical topics with the relevant physiology and pathophysiology and other basic science components. In addition, there will be integration of content related to other curricular domains, or "threads", that include Patient Care Communication, Evidence Based Medicine, Health Information Technology, Quality Improvement Patient Safety, Professionalism, Scientific Inquiry and Public Health. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
MED SC-M 811 - CHRONIC AND PREVENTIVE CARE
12 credits.
A Phase 2 course in the MD program that uniquely positions students to 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. Students' clinical experiences will occur in primary care, behavioral health, and other ambulatory and community-based settings that focus on chronic disease management. Continuity will occur in primary care clinics over the 12 weeks as well as by student participation in a longitudinal community health engagement project. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-M 812 - ACUTE CARE

12 credits.
A Phase 2 course that is centered 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. Activities emphasize providing acute care in inpatient and outpatient urgent care settings as well as on the inpatient wards, and developing acute management plans and subsequent transition of care plans. Clinical experiences will be in acute care settings such as the emergency department and inpatient medicine (both general and subspecialty), psychiatry, and neurology. The block builds upon the fundamental science concepts introduced in Body in Balance and Mind and Motion during Phase 1, including Ohm's Law, acid-base balance, and volume regulation. Structured educational sessions will proceed through the 12-week block following an organ system-based approach and employ varied modalities including podcasts, real-time case discussions, webcasts, independent readings, and online nationally supported modules. All students will complete an integrated patient-centered experience by participating in the care of a patient from an urgent admission through inpatient treatment and discharge. Assessment will include faculty global ratings of performance, written projects, clinical simulation, task completion, National Board of Medical Examiners (NBME) shelf exam, and an Objective Structured Clinical Examination (OSCE). Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-M 813 - SURGICAL AND PROCEDURAL CARE

12 credits.
A phase 2 course in the MD program that is focused on the care of adults and children undergoing an operation or procedure, including the 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 . Patient care experiences will take place in the clinics, emergency department, inpatient wards, inpatient and outpatient operating rooms and procedure suites. The block builds upon the basic science concepts introduced in Phase 1, including cerebral spinal fluid production and flow, fluids and electrolytes, consciousness, inflammation and wound healing, and cancer biology. Structured educational sessions will proceed through a 12 week block following an anatomic approach using case discussions, podcasts, curated independent reading, online nationally supported modules, and simulation skills. All students will complete a longitudinal patient care experience by participating in the pre-operative preparation, anesthesia care, operative care, and post-operative care of one inpatient. In addition, there will be integration of content related to other curricular domains, or "threads", that include Patient Care Communication, Evidence Based Medicine, Health Information Technology, Quality Improvement Patient Safety, Professionalism, Scientific Inquiry and Public Health. Enroll Info:

## None

Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-M 902 - AMBULATORY ACTING INTERNSHIP

4 credits.
Designed for students to assume primary responsibility of patients in the outpatient setting. Students will work with direct oversight of a faculty attending as they interview and examine patients, decide upon accurate diagnoses and formulate an appropriate treatment plan. The course will be offered among various specialties and will take place across the statewide campus. A primary focus of this rotation is medical decisionmaking regarding the ordering of tests and labs, medications and other therapeutic interventions. Students will be expected to demonstrate effective communication with patients. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-M 909 - INTERNSHIP PREP COURSE

3 credits.
A required course for all medical students. The course is 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. Enroll Info: None
Requisites: Enrollment limited to Medical Students in their fourth year only.
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 <br> 2 credits.

This course provides a two-pronged opportunity for fourth year medical students: 1) to re-engage with MEDiC clinics where they may have volunteered during their first and second years of medical school, and to further appreciate the complexities of serving marginalized populations; 2) the opportunity to use their recent clinical experience to contribute as both mentors and collaborators with students from multiple health professional professions. Students will be asked to look carefully at the broad public health issues affecting the patients they will treat in the MEDiC clinics and to appreciate how these issues inform their health status, health care and health access. Students will also be asked to investigate the role of race in health disparities, as well as the role of socio-economic status. Enroll Info: None
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 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. Enroll Info: None
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 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 classroombased clinical skills and anatomy. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020
MED SC-V 576 - SMALL ANIMAL EMERGENCY AND CRITICAL CARE I 1 credit.

This course is designed to introduce students in the first and second year of veterinary medical school to various topics of emergency and critical care medicine. Enroll Info: Good academic standing as a 1 st or 2nd year Vet Med program stdt
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
MED SC-V 577 - SMALL ANIMAL EMERGENCY AND CRITICAL CARE II 1 credit.

This course is available to third year veterinary medical students. It will cover various topics in emergency and critical care medicine. Through lectures and case discussions, an introduction to several areas of emergency and critical care medicine will be presented. Enroll Info: 3rd yr veterinary medical stdt st; prior successful completion of MED SC-V 576
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2019

## MED SC-V 625 - VETERINARY DIAGNOSTIC AND THERAPEUTIC TECHNIQUES

0-1 credits.
This course will complete the formal laboratory instruction of DVM students in detailed examination techniques and diagnostic and therapeutic procedures relevant to veterinary procedures on all species of domestic animals. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
MED SC-V 629 - VETERINARY NUTRITION
1 credit.
Presents awareness of the importance of nutrition in the veterinary practice. Enroll Info: 1st yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Vet Med 3 st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Vet Med 3 st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020

## MED SC-V 634 - FOOD ANIMAL MEDICINE

5 credits.
Introduce students to basic principles for food animal species. To integrate food animal medicine, theriogenology, nutrition and preventive medicine concepts into one course. Enroll Info: 3rd yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-V 635 - SWINE MEDICINE

1 credit.
This course is intended for third year veterinary medical students. It will focus 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. Enroll Info: Veterinary Medical student
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: 4th yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: 4th yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
MED SC-V 669 - SMALL ANIMAL CARDIOLOGY ROTATION 2 credits.

Diagnostic techniques and therapy available for the management of cardiology patients. Enroll Info: 4th yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## MED SC-V 670 - SENIOR ROTATION IN LARGE ANIMAL MEDICINE SERVICE <br> 2 credits.

A practical course in diagnosis and medical treatment of diseases of horses, cattle, sheep, goats and pigs. Senior students under supervision will examine, admit and discharge cases in the Veterinary Medical Teaching Hospital. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

MED SC-V 672 - SENIOR ROTATION IN THERIOGENOLOGY SERVICE 2 credits.

A practical course on the management of reproduction and reproductive problems in domestic animals including pets. Enroll Info: Vet Med st or cons inst
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
MED SC-V 674 - SENIOR ROTATION IN AMBULATORY SERVICE 2 credits.

A practical course in the diagnosis, treatment, and recommendation of preventive measures for common medical, surgical and management problems on farms. Senior students will examine the environmental influences associated with such problems. Enroll Info: Vet Med st or cons inst
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
MED SC-V 675 - SPECIAL TOPICS
1-5 credits.
Topics vary. Enroll Info: Cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

MED SC-V 678 - SMALL ANIMAL INTERNAL MEDICINE 2 credits.

To enable student to develop the ability to analyze, organize and integrate information effectively to make clinical decisions relating to the diagnosis, prognosis, management and control of diseases. Enroll Info: 4th yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: 4th yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
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 2020

## MED SC-V 701 - PRODUCTION MEDICINE I

2 credits.
Students 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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## MED SC-V 703 - PRODUCTION MEDICINE II

2 credits.
An elective rotation for students interested in dairy practice and udder health in particular. Students will investigate and analyze farm and laboratory data and evaluate recommendations using benefit/cost analyses. Students will perform milking system, milking procedure, and environmental management evaluations. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MED SC-V 705 - PRODUCTION MEDICINE III-APPLIED DAIRY NUTRITION

 2 credits.A clinical elective rotation for students interested in applying principles of nutrition to dairy practice. The rotation will include lectures, computer exercises, and farm visits. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
MED SC-V 707 - PRODUCTION MEDICINE IV
2 credits.
Assess and use dairy farm records using Dairy Comp 305 software; devise partial budgets and calculate the cost of producing milk on dairy farms. Enroll Info: MED SC-V 701, 703, 705
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
MED SC-V 775 - EXTERNSHIP
1-24 credits.
This course is an elective for fourth year veterinary medical students which offers faculty coordinated experience in the veterinary medical profession outside the School. Enroll Info: Vet Med st or cons inst 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

## 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. Enroll Info:

## None

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 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: SOC/POP HLTH 797 and STAT/B M I 542
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MEDICINE 720 - ENDOCRINOLOGY AND METABOLISM

2 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MEDICINE 809 - INTERSECTION OF HEALTH CARE AND INCARCERATION <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812, and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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 clinicallyoriented 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 physicianscientist mentor. Enroll Info: 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: Fall 2020
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. Enroll Info: None
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
MEDICINE 904 - SCIENCE OF CUTANEOUS DISEASE
2 credits.

The practice of Dermatology encompasses diseases of the skin, mucosal surfaces, hair and nails. The specialty integrates cellular and molecular biology, immunology, microbiology, and physiology to support patient care decisions. Introduces the basic science principles of normal and abnormal cutaneous functioning, building on the principles introduced in the Phase 1 Invaders and Defense course. These core concepts will be applied though interactions with patients in the clinical setting. By the end of this course, students will be equipped with foundational basic science knowledge to diagnose and treat dermatologic diseases. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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: Fall 2020

## MEDICINE 906 - ACE ACUTE CARE FOR ELDERLY CONSULTATION SERVICES ELECTIVE <br> 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 multidisciplinary strategies to manage patients' long-term care goals. Enroll Info: None
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

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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MEDICINE 909 - INFECTIOUS DISEASE TRANSPLANT SERVICE ELECTIVE <br> 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. Enroll Info: None
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
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. Enroll Info:

## None

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

## 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. Enroll Info: None
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

## MEDICINE 913 - BASIC SCIENCE FOUNDATIONS OF CLINICAL THERAPEUTICS <br> 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. Enroll Info: None
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

## MEDICINE 915 - CLINICAL THERAPEUTICS - PREPARATION FOR RESIDENCY <br> 2-4 credits.

Students will be better prepared for internship by developing a greater understanding of common medical diseases and the best current pharmacologic and non-pharmacologic therapies. Students will learn how to apply this knowledge through recorded lectures and interactive casebased web-conferences. Enroll Info: None
Requisites: 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

## 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 specificcommunication 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. Enroll Info: None 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

## MEDICINE 917 - SMOKING CESSATION: PUTTING EVIDENCE INTO

 PRACTICE ELECTIVE2 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## MEDICINE/B M I 918 - HEALTH INFORMATICS FOR MEDICAL STUDENTS ELECTIVE <br> 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. Enroll Info: None
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

## MEDICINE 919 - INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE IN MEDICINE <br> 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. Enroll Info: None 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

## 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 supervisorstudent 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. Enroll Info: None
Requisites: 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

## MEDICINE 922 - AMBULATORY GENERAL INTERNAL MEDICINE ADVANCED ELECTIVE <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None
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 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. Enroll Info: None
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
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. Enroll Info: None
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

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: Als will communicate with colleagues, primary care providers and consultants. Als will demonstrate thorough patient handoffs 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. Als 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, Als will develop efficiency in accomplishing the day to day tasks necessary for the coordination and management of patient care. Enroll Info: None
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 2020

## MEDICINE 939 - INPATIENT-OUTPATIENT ALCOHOL-DRUG ABUSE ELECTIVE <br> 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. Enroll Info: None
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. Enroll Info: None 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

## 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. Enroll Info: None
Requisites: 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

## 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.
Enroll Info: None
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

## 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. Enroll Info: None 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

## MEDICINE 949 - ADULT INPATIENT/OUTPATIENT CARDIOVASCULAR DISEASES ELECTIVE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## MEDICINE 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. Enroll Info: None Requisites: 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

## MEDICINE 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. Enroll Info: None
Requisites: 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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## MEDICINE 965 - GASTROENTEROLOGY CLINICAL ELECTIVE

 2-4 creditsObserve 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. Enroll Info: None
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

## MEDICINE 969 - TRANSFUSION MEDICINE ELECTIVE

2 credits.

Hands-on elective experience in this sub-specialty of clinical pathology that intersects with all medical and surgical specialties. Topics include transfusion indications, special blood products, transfusion reactions, therapeutic apheresis, blood donation, and lab interpretation. The experience is ideal preparation for careers in medical and pediatric specialties, surgical specialties, anesthesiology, obstetrics gynecology, and pathology. Enroll Info: None
Requisites: 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

## MEDICINE 970 - INPATIENT-OUTPATIENT GASTROENTEROLOGY/ HEPATOLOGY CONSULT SERVICE ELECTIVE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None 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

## 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. Enroll Info: None
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

## 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 withbronchoalveolar 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. Enroll Info: None 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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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
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. Enroll Info: None
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

## 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. Enroll Info: None
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 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. Enroll Info: None

## 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
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, we will 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, we will 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. We will 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. Enroll Info: None
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

## MEDIEVAL/HISTORY/RELIG ST 309 - THE CRUSADES: CHRISTIANITY AND ISLAM <br> 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. Enroll Info: So st Requisites: None
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
MEDIEVAL/HISTORY 313 - INTRODUCTION TO BYZANTINE HISTORY AND CIVILIZATION
3-4 credits.
Topical consideration of the entire scope of the history of the Byzantine
Empire, from the fourth to the fifteenth centuries, and selected aspects of
its culture. Enroll Info: So st
Requisites: None
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 2012
MEDIEVAL/HISTORY/RELIG ST 318 - MEDIEVAL SOCIAL AND
INTELLECTUAL HISTORY, 1200-1450
3-4 credits.
Emphasis on social change and intellectual developments. Enroll Info: So st
Requisites: None
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 2012
MEDIEVAL/HIST SCI 322 - ANCIENT AND MEDIEVAL SCIENCE 3 credits.

Scientific ideas and institutions from the beginnings of Greek philosophy to the Renaissance. Enroll Info: Jr st or cons inst. Grads must enroll concurrently in HIST SCI 622
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: 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. Enroll Info: None
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
MEDIEVAL/FOLKLORE/LITTRANS 345 - IN TRANSLATION: THE
SCANDINAVIAN TALE AND BALLAD
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2020
MEDIEVAL/FOLKLORE/LITTRANS 346 - IN TRANSLATION: THE
ICELANDIC SAGAS
3-4 credits.
Enroll Info: Jr st or cons inst
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: No
Last Taught: Spring 2017
MEDIEVAL/SCAND ST 407 - OLD NORSE
3 credits.
Reading of texts from the Sagas and Eddas, with comparative study of linguistic structure and literary style. Enroll Info: Grad st or cons inst Requisites: None
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

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. Enroll Info: None
Requisites: 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 2019
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. Enroll Info: Grad st or cons inst; or Scand St/MEDIEVAL/SCAND ST 407
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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 (through15th century): Poema de mio Cid, mester de juglaria, Libro de buen amor, mester de clerecia, El conde Lucanor, La Celestina, etc. Enroll Info: None
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 2020
MEDIEVAL/ART HIST 415 - TOPICS IN MEDIEVAL ART
3 credits.
An advanced lecture course, covering specific aspects of 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." Enroll Info: Jr st one Art Hist crse at 200 level and one at 300 level, or cons inst Requisites: None
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 2020

MEDIEVAL/ENGL 423 - TOPIC IN MEDIEVAL LITERATURE AND CULTURE 3 credits.

Study of a topic in medieval literature. Enroll Info: None
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. Enroll Info: None
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

## 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. Enroll Info: None
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
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. Enroll Info: None
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 2017

## 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. Enroll Info: None
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
MEDIEVAL/SCAND ST 430 - THE VIKINGS
4 credits.
Within a historical framework, a thorough introduction to the culture, literature, and religion of the Vikings. Enroll Info: Jr St or cons inst.
Knowledge of a Scand lang is not required
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 2020
MEDIEVAL/RELIG ST 440 - FRANCIS OF ASSISI: LITERATURE AND THE ARTS
3 credits.
Francis of Assisi: Literature and the Arts." Focus on accounts of St. Francis's life as written by medieval authors (e.g., Bonaventure of Bagnoregio, Thomas of Celano, the Franciscan Brother Leo) as well as works written by Francis himself. Examination of the relevance of Francis's teachings to contemporary reflections regarding relationships with the Other, the environment and animals. Discussion of issues related to religion, politics, bio-politics and environmental studies. Enroll Info: Sophomore standing or above
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: No
Last Taught: Spring 2015
MEDIEVAL/SCAND ST 444 - KALEVALA AND FINNISH FOLK-LORE 4 credits.

Kalevala and the oral literature of Finland. Enroll Info: Jr st or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## MEDIEVAL/FOLKLORE/SCAND ST 446 - CELTIC-SCANDINAVIAN CULTURAL INTERRELATIONS <br> 3 credits.

Examination of shared traditions and historical connections between the North and Northwest of Europe. Readings of medieval and premodern Scandinavian, Scottish, Welsh and Irish sagas, histories, talkes. Discussion of the role of folklore in modern Celtic and Scandinavian societies. Enroll Info: So st or above required, or cons inst
Requisites: None
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
MEDIEVAL/SPANISH 503 - SURVEY OF MEDIEVAL LITERATURE 3 credits.

Introduction to major 13th and 14th-century Castilian works. Enroll Info: None
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
MEDIEVAL/SPANISH 504 - SURVEY OF MEDIEVAL LITERATURE
3 credits.
Introduction to major 14th and 15th-century Castilian works. Enroll Info:
None
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 2017
MEDIEVAL/ENGL 520 - OLD ENGLISH
3 credits.
The elements of Old English grammar with selected readings. Enroll Info:

## None

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: Fall 2020

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-byline 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. Enroll Info: None
Requisites: 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
MEDIEVAL/SPANISH 541 - OLD SPANISH
3 credits.
Historical Spanish phonology, morphology, and syntax, with application to theories of language variation and change. Enroll Info: None
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 2018
MEDIEVAL/HIST SCI/HISTORY/MED HIST/S\&A PHM 562 - BYZANTINE MEDICINE AND PHARMACY
3 credits.
Byzantine and Islamic medicine and drug lore from Oribasius to the beginnings of the Italian Renaissance (c. 350 - c. 1400 A.D.). Enroll Info: None
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: Spring 2015
MEDIEVAL/LATIN 563 - MEDIAEVAL LATIN
3 credits.
Enroll Info: LATIN 204 or appropriate placement score
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
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.

Enroll Info: Advanced knowledge of German
Requisites: None
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 2020
MEDIEVAL/ITALIAN 659 - DANTE'S DIVINA COMMEDIA
3 credits.
Lectures on Dante's life and times, reading Divine Comedy, commentary,
discussion, reports. Enroll Info: ITALIAN 321-322 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
MEDIEVAL/ITALIAN 671 - IL DUECENTO
3 credits.
I: A systematic study of the earliest literary texts in Italy; the rise of the love lyric among the Sicilian poets; representative narrative works. II: The development of the lyric from Guittone d'Arezzo to the poets of the Dolce Stil Nuovo (Guinizzelli, Cavalcanti, Dante). Enroll Info: ITALIAN 321-322 or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
MEDIEVAL 699 - DIRECTED STUDY
1-3 credits.
Enroll Info: None
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 2012
MEDIEVAL/FRENCH 701 - INTRODUCTION A L ANCIEN FRANCAIS
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

MEDIEVAL/FRENCH 703 - LA LITTERATURE FRANCAISE DU XIV ET DU
XV SIECLE
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
MEDIEVAL/FRENCH 704 - LA LITTERATURE FRANCAISE DU XIV ET DU XV SIECLE
3 credits.
Enroll Info: None
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.
Enroll Info: None
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. Enroll Info: None
Requisites: 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; may be repeated for different languages. Enroll Info: Cons inst or GERMAN/ MEDIEVAL 651
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

MEDIEVAL/ENGL 803 - TOPICS IN MEDIEVAL LITERATURE 3 credits.

Study of a topic in Medieval literature. Enroll Info: None
Requisites: 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

MEDIEVAL/SPANISH 842 - SEMINAR-MEDIEVAL LITERATURE 3 credits.

Seminar focusing on literary, textual criticism or theoretical topics relevant to Medieval Spanish literature. Enroll Info: None
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

MEDIEVAL/FRENCH 939 - LA LITTERATURE MEDIEVALE 3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## 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. Enroll Info: None 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
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: Fall 2020
MICROBIO 102 - GENERAL MICROBIOLOGY LABORATORY
2 credits.
Covers techniques and procedures used in general microbiology,
including cultivation, enumeration, aseptic techniques, physiology and selected applications. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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
MICROBIO 303 - BIOLOGY OF MICROORGANISMS
3 credits.
Basic biology of microorganisms, including structure, function, physiology, genetics, ecology, diversity, and evolution. Enroll Info: None Requisites: (ZOOLOGY/BIOLOGY 101, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or 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: Fall 2020

MICROBIO 304 - BIOLOGY OF MICROORGANISMS LABORATORY 2 credits.

Introduction to modern laboratory techniques used to study the distribution and properties of microorganisms. Enroll info: None 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: Fall 2020
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: (MICROBIO 102 or MICROBIO 304) and 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 2020
MICROBIO/FOOD SCI 325 - FOOD MICROBIOLOGY
3 credits.
Principles of food preservation, epidemiology of foodborne illness, agents of foodborne illness, food fermentations and biotechnology. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 HUMANS3 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. Enroll Info: None
Requisites: MICROBIO 101 or 303 or graduate/professional standing Repeatable for Credit: No
Last Taught: Spring 2020
MICROBIO 375 - SPECIAL TOPICS
1-4 credits.
Specialized subject matter of current interest to undergraduate students. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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: Spring 2019

## MICROBIO 450 - DIVERSITY, ECOLOGY AND EVOLUTION OF

 MICROORGANISMS3 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. Enroll Info: None 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: Fall 2020
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: 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 (ZOOLOGY/ BIOLOGY 102, BOTANY/BIOLOGY 130, or 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
MICROBIO 526 - PHYSIOLOGY OF MICROORGANISMS
3 credits.
Biochemistry of microbial processes. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or 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 2020

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. Enroll Info: None
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 2020
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 onethird on lower eukaryotic microbes. Enroll Info: None
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 <br> 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. Enroll Info: None
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: No
Last Taught: Fall 2020
MICROBIO 625 - ADVANCED MICROBIAL PHYSIOLOGY
3 credits.
Focuses on microbial physiology with an emphasis on metabolic processes. Enroll Info: None
Requisites: MICROBIO 526 or (BIOCHEM 507 and 508) or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013
MICROBIO 632 - INDUSTRIAL MICROBIOLOGY/BIOTECHNOLOGY 2 credits.

Application of modern techniques of genetics and physiology to the largescale production of microbial products; industrial strain improvement; scale-up of microbial processes; survey of industrial processes using microorganisms. Enroll Info: None
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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2019
MICROBIO 681 - SENIOR HONORS THESIS
2-3 credits.
Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Enroll Info: None
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
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. Enroll Info: None
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 2020

## MICROBIO 691 - SENIOR THESIS

2 credits.
Individual study for majors completing theses as arranged with a faculty member. Enroll Info: None
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
MICROBIO 692 - SENIOR THESIS
2 credits.
Second semester of individual study for majors completing theses as arranged with a faculty member. Enroll Info: None
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
MICROBIO 699 - SPECIAL PROBLEMS
1-4 credits.
Individual advanced work in an area of Microbiology under the direct guidance of a faculty member. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
MICROBIO 731 - SEMINAR
1 credit.
Reviews of microbiological subjects, and reports on research work. Enroll Info: None
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: Fall 2020

MICROBIO 810 - CURRENT ISSUES IN MICROBIOLOGY 1 credit.

Explores the diversity of scientific topics comprising the field of contemporary microbiology. Enroll Info: None
Requisites: Declared in Microbiology doctoral program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
MICROBIO 811 - ADVANCED PROBLEMS IN MICROBIOLOGY
1 credit.
Explores the diversity of scientific topics comprising the field of contemporary microbiology. Enroll Info: None
Requisites: Declared in Microbiology doctoral program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
MICROBIO 875 - SPECIAL TOPICS
1-4 credits.
Specialized subject matter of current interest to graduate students. Enroll Info: None
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
MICROBIO 901 - ADVANCED SEMINAR
1 credit.
Recent advances in specialized areas of microbiology. Enroll Info: None 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MICROBIO 990 - RESEARCH

1-9 credits.
Full lab and literature review of a problem in microbiology. Leads to preparation of thesis and publication. Enroll Info: None
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

## MILITARY SCIENCE (MIL SCI)

MIL SCI 101 - FOUNDATIONS OF OFFICERSHIP
1 credit.
Introduces students to life as a commissioned officer profession.
Establishes fundamentals of leadership, Army values and skills required of a successful Army officer. Enroll Info: Open to Freshmen Sophomore only
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: Open to Freshmen Sophomore only
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## MIL SCI 110 - LEADERSHIP LAB 1A

1 credit.
Students use the coursework acquired in class to 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. Enroll Info: Cons of department head; con reg in MIL SCI 101. Open to Fr
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
MIL SCI 111 - LEADERSHIP LAB 1B
1 credit.
Students continue with tasks from 110 lab. Enroll Info: Cons of department head; con reg in MIL SCI 102. Open to Fr
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## MIL SCI 201 - INDIVIDUAL LEADERSHIP STUDIES

2 credits.
Students identify successful leadership characteristics through observation of others and self through experiential learning exercises. Students record observed traits (good and bad) in a dimensional leadership journal and discuss observations in small group settings. Students will also learn map reading and land navigation skills, including conversion of magnetic and grid azimuths and resection. Enroll Info:
Open to Freshmen Sophomore only

## Requisites: None

Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Open to Freshmen Sophomore only
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## MIL SCI 210 - LEADERSHIP LAB 2A

1 credit.
Students in this course will implement small unit tactical training, learning Army methods for approaching and reacting to tactical situations. This couse will cover land navigation skills, information processing skills, and Army leadership principles. Enroll Info: Cons of department head; con reg in MIL SCI 201. Open to Fr
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
MIL SCI 211 - LEADERSHIP LAB 2B
1 credit.
Students in this course learn Army organization and planning methods, and have the opportunity to practice and implement these methods in practical exercises. Enroll Info: Cons of department head; con reg in MIL SCI 202. Open to Fr
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## MIL SCI 301 - LEADERSHIP AND PROBLEM SOLVING

2 credits.
Students 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. Students receive direct feedback on leadership abilities. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Cons of department head; con reg in MIL SCI 301
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
MIL SCI 311 - LEADERSHIP LAB 3B
1 credit.
Students in this course learn in-depth leadership procedues, and have the opportunity to practice the Army planning process for groups of 30 personnel. They also learn how to conduct Army training and classes so that they can teach other cadets based on their prior knowledge. Enroll Info: Cons of department head; con reg in MIL SCI 302

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2020

## MIL SCI 401 - LEADERSHIP AND MANAGEMENT <br> 2 credits.

Develop students' proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Students explore training management methods of effective staff collaboration, and developmental counseling techniques. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## MIL SCI 402 - OFFICERSHIP

2 credits.
Study 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 students throughout the semester. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020

## MIL SCI 410 - LEADERSHIP LAB 4A

1 credit.
Students in this couse learn how to allocate resources and time to adequately train large groups of people. They practice creating training plans, and bringing together all of the elements necessary to complete training. They also have the opportunity to aid in the evaluation of others leadership, which gives them the ability to better review their own leadership. Enroll Info: Cons of department head; con reg in MIL SCI 401
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## MIL SCI 411 - LEADERSHIP LAB 4B

1 credit.
Students in this course learn the final elements of an Army officer's job. They mentor and plan training, as well as monitor the effectiveness of others. They learn fine points of improving others performance and getting the most out of subordinates. Enroll Info: Cons of department head; con reg in MIL SCI 402
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
MIL SCI 491 - AMERICAN MILITARY HISTORY
3 credits.
Surveys the American military experience from the Colonial Era to the present. Students will 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. Enroll Info: None
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. Enroll Info: None
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 2020

M\&ENVTOX/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. Enroll Info: None
Requisites: PHMCOL-M/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 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: (CHEM 341 or 343) and ((BOTANY/BIOLOGY 130 and ZOOLOGY/BIOLOGY 102) or 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 <br> 1 credit.

Addresses absorption, biotransformation, elimination of toxins in a wide variety of taxa (plants, invertebrates, vertebrates). Enroll Info: None
Requisites: M\&ENVTOX 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. Enroll Info: None
Requisites: M\&ENVTOX 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. Enroll Info: None
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 2017

## 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 decisionmaking and management form a public health practice perspective will be discussed. Enroll Info: None
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. Enroll Info: None
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\&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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## M\&ENVTOX 990 - RESEARCH

1-9 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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

## MOLECULAR BIOLOGY (MOL BIOL)

MOL BIOL 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Sr st cons honors 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: Yes, unlimited number of completions Last Taught: Fall 2020

MOL BIOL 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Sr st cons honors 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: Yes, unlimited number of completions
Last Taught: Spring 2020

MOL BIOL 686 - SENIOR HONORS SEMINAR IN MOLECULAR BIOLOGY 1 credit.

A seminar on the origins, present frontiers, and future prospects of molecular biology. Students will read, write about, and discuss papers from the original literature. Social and ethical issues related to technologies based on molecular biology are considered. Enroll $\mathrm{Info}: \mathrm{Sr}$ st; juniors may register with cons inst
Requisites: Senior and Honors
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 2020

## MOL BIOL 691 - SENIOR THESIS

3 credits.

Enroll Info: Sr st and cons inst
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
MOL BIOL 692 - SENIOR THESIS
3 credits.
Enroll Info: Sr st and cons inst
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

## MOL BIOL 699 - DIRECTED STUDIES IN MOLECULAR BIOLOGY 1-4 credits.

Individual research projects conducted under professorial supervision.
Enroll Info: Jr or Sr st; cons inst. 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: Fall 2020

## 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. Enroll Info: 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. Enroll Info: 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: Fall 2020
MUSIC 41 - CONCERT BAND
1 credit.

Rehearsal and performance of music from wind ensemble and band literature. Enroll Info: 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: Fall 2020

MUSIC 42 - VARSITY BAND
1 credit.
Rehearsal and performance of music for athletic events. Enroll Info: Students will audition for placement prior to the beginning of the semester
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
MUSIC 43 - UNIVERSITY BAND
1 credit.

Exploration and performance of standard band literature. Enroll Info:
None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
MUSIC 50 - CONCERT CHOIR
1 credit.

Choral vocal training, study and performance of concert literature. Enroll Info: 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: Fall 2020
MUSIC 52 - WOMEN'S CHORUS
1 credit.
Choral vocal training, study and performance of concert literature. Enroll Info: 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: Fall 2020

MUSIC 53 - CHORAL UNION
1 credit.
Choral vocal training, study and performance. Enroll Info: Students will audition for placement prior to the beginning of the semester

## Requisites: None

Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
MUSIC 55 - MASTERS' SINGERS
1 credit.
Choral vocal training, study and performance of concert literature. Enroll Info: 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. Enroll Info: 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: Fall 2020
MUSIC 58 - MADRIGAL SINGERS
1 credit.
Ensemble specializing in 16th- and 17th-century secular music. Enroll Info: 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: Fall 2020

MUSIC 59 - UNIVERSITY CHORUS
1 credit.

Exploration and performance of standard choral literature. Enroll Info: None
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. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## MUSIC 61 - CHAMBER ORCHESTRA

1 credit.
Rehearsal, study and performance of early classical symphonies, opera, and concerto literature. Enroll Info: 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
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

## MUSIC/FOLKLORE 103 - INTRODUCTION TO MUSIC CULTURES OF THE WORLD <br> 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. Enroll Info: None
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

## 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. Enroll Info: 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 <br> 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. Enroll Info: None
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
MUSIC 106 - THE SYMPHONY
3 credits.

Orchestral music from Haydn to present, relation to other arts. Enroll Info:
None
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 2020
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. Enroll Info: None
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
MUSIC 110 - INTRODUCTION TO MUSIC TECHNOLOGY
2 credits.

Introduction to notation, sequencing, and digital audio softwares. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Summer 2013

## MUSIC 113 - MUSIC IN PERFORMANCE

1 credit.
Descriptive lectures on chamber music with performances by instructor
and others. Enroll Info: None
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: Fall 2020
MUSIC 121 - MUSICA PRACTICA 1
3 credits.
Strategies for composing, understanding, and writing about music. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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

MUSIC 122 - MUSICA PRACTICA 2
3 credits.

Continuation of strategies for composing, understanding, and writing about music. Enroll Info: None
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 2020
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. Enroll Info: None
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

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. Enroll Info: None 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.
Intoductory istruction in aural skills. Enroll Info: None
Requisites: Concurrent enrollment in MUSIC 121
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
MUSIC 172 - MUSICA PRACTICA: AURAL SKILLS 2
1 credit.

Continuation of introductory instruction in aural skills. Enroll Info: None
Requisites: MUSIC 171 and concurrent enrollment in MUSIC 122
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
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.
Enroll Info: None
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 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. Enroll Info: None
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: Summer 2020
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. Enroll Info: None
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: Summer 2020

## MUSIC 204 - STUDY ABROAD: INTERMEDIATE MUSIC THEORY OR HISTORY <br> 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. Enroll Info: 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: 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. Enroll Info: None
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
MUSIC 206 - THE LEGENDARY PERFORMERS
2 credits.
A survey of pioneer performers who influenced popular musical taste from 1920 to 1950. Enroll Info: None
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 2019
MUSIC 211 - SURVEY OF THE HISTORY OF WESTERN MUSIC
3 credits.

Introduction to development of music in the European tradition, before
1750. Enroll Info: None

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 2020
MUSIC 212 - SURVEY OF THE HISTORY OF WESTERN MUSIC
3 credits.

Introduction to development of music in the European tradition, 1750 to
the present. Enroll Info: None
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 2020
MUSIC 221 - MUSICA PRACTICA 3
3 credits.
Advanced strategies for composing, understanding, and writing about music. Enroll Info: None
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 2020

## MUSIC 222 - MUSICA PRACTICA 4

3 credits.
Advanced strategies for composing, understanding, and writing about music. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## MUSIC 240 - STYLE, SOUND AND SOCIETY

3 credits.
Explore the relationships between the arts as they intersect with aspects of society, in history, and in the present day through listening, writing and drawing projects. In the process, explore your own ideas regarding current issue and learn to express themselves through the arts. No previous experience in any art form is necessary. Enroll Info: None
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. Enroll Info: None
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 2020
MUSIC 253 - CONDUCTING
2 credits.
Conducting techniques, emphasis on practical application to vocal and instrumental groups. Enroll Info: None
Requisites: MUSIC 212, 221, and 271
Repeatable for Credit: No
Last Taught: Fall 2020
MUSIC 254 - CONDUCTING
2 credits.
Continuation of conducting techniques, emphasis on practical
application to vocal and instrumental groups. Enroll Info: None
Requisites: MUSIC 253
Repeatable for Credit: No
Last Taught: Spring 2020
MUSIC 256 - UNIVERSITY OPERA
1-2 credits.
Opera role: preparation, rehearsal and performance in University opera production. Enroll Info: 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: Fall 2020
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. Enroll Info: 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: Fall 2020

## MUSIC 262 - JAZZ ENSEMBLE

1 credit.
Assignments in performing ensemble literature. Enroll Info: 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: Fall 2020
MUSIC 264 - ENSEMBLE: WISCONSIN SINGERS
1 credit.

The training of singers and musicians for show choir. Enroll Info: 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. Enroll Info: 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: Fall 2020

MUSIC 266 - BLACK MUSIC ENSEMBLE
1 credit.

Assignments in performing ensemble literature. Enroll Info: 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. Enroll Info: 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: Fall 2020

MUSIC 268 - ENSEMBLE-PERCUSSION
1 credit.
Assignments in performing ensemble literature. Enroll Info: 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: Fall 2020
MUSIC 269 - ENSEMBLE-STRING
1 credit.

Assignments in performing ensemble literature. Enroll Info: 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: Fall 2020
MUSIC 270 - ENSEMBLE-GUITAR
1 credit.
Rehearsal, coaching and preparing guitar literature for performance of duos, trios, and quartets. Enroll Info: 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: Fall 2020
MUSIC 271 - MUSICA PRACTICA: AURAL SKILLS 3
1 credit.
Intermediate aural skills instruction. Enroll Info: None
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 2020
MUSIC 272 - MUSICA PRACTICA: AURAL SKILLS 4
1 credit.

Intermediate aural skills instruction. Enroll Info: None
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 2020

MUSIC 273 - CONTEMPORARY CHAMBER ENSEMBLE
1 credit.
Assignments in performing ensemble literature. Enroll Info: Audition and instructor consent required for students enrolling the first time
Requisites: MUSIC 273
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
MUSIC/CURRIC 300 - INTRODUCTION TO MUSIC EDUCATION
2 credits.

Introduction to the field of music education, including philosophy, history, and current practices and trends. Survey of music education in and out of schools as situated within diverse, pluralistic communities. Enroll Info: None

Requisites: MUSIC/CURRIC 303 or concurrent enrollment
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 2020
MUSIC/CURRIC 301 - MUSIC LEARNING AND TEACHING
2 credits.

The learning and teaching of music at the elementary and middle school levels. Enroll Info: None
Requisites: MUSIC/CURRIC 300 and concurrently enrolled in 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 2020

MUSIC/CURRIC 302 - MUSIC LEARNING AND TEACHING 2
2 credits.

The learning and teaching of music at the high school level. Enroll Info: None
Requisites: MUSIC/CURRIC 301 and 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 2020
MUSIC/CURRIC 303 - FIELDWORK IN MUSIC COMMUNITIES
1 credit.
Fieldwork in music communities in the Madison area. Enroll Info: None Requisites: 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 <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2016
MUSIC 306 - GREAT COMPOSERS
3 credits.

Examination of the life, cultural background, and works of a major figure in Western music history. Enroll Info: None
Requisites: MUSIC 101, 105, 106, 201, 205, 206, or MUSIC/
FOLKLORE 103
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 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 21 st-century America; no reading knowledge of music is required. Enroll Info: None
Requisites: Sophomore standing and declared in honors program
Course Designation: Breadth - Humanities
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 2020

## MUSIC/AFROAMER/DANCE 318 - CULTURAL CROSS CURRENTS: WEST AFRICAN DANCE/MUSIC IN THE AMERICAS <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Spring 2020

MUSIC 331 - JAZZ IMPROVISATION
3 credits.
Theoretical concepts, development of aural skills, and analysis procedures related to the jazz idiom. Enroll Info: This is a performance course and students are expected to have ability in voice or instrument.
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 2020
MUSIC 332 - JAZZ IMPROVISATION
3 credits.
More advanced theoretical concepts, development of aural skills, and analysis procedures related to the jazz idiom. Enroll Info: None
Requisites: MUSIC 331
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 2020

MUSIC/CURRIC 337 - PRACTICUM IN TEACHING MUSIC 1 credit.

Observation and participation in K-12 music education settings. Enroll Info: None
Requisites: Declared in Music: Education and concurrent enrollment in 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: Fall 2020
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. Enroll Info: None
Requisites: MUS PERF 401, 402, 403, 405, 407, 409, 41 1, 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: Fall 2020

## MUSIC/CURRIC 344 - TEACHING VOCAL STYLES IN THE MUSIC CLASSROOM <br> 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. Enroll Info: None
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. Enroll Info: None 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). Enroll Info: None
Requisites: MUS PERF 401, 402, 403, 405, 407, 409, 41 1, 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 2020

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. Enroll Info: None
Requisites: MUSIC 151
Course Designation: Breadth - Humanities
Level - Elementary
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2015
MUSIC/CURRIC 354 - TEACHING MUSIC
3 credits.
Development of musical skills and understandings. Ways of including music in the curriculum. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2013
MUSIC/AFROAMER 400 - MUSIC CULTURES OF THE WORLD: AFRICA EUROPE, THE AMERICAS
3 credits.
Explores the performance, transmission, and consumption of traditional and popular musics of Africa, Europe, and the Americas. Employs musical-analytic and critical approaches to trace transnational musical circulation. Enroll Info: None
Requisites: MUSIC 212
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 2011
MUSIC/FOLKLORE 401 - MUSICAL CULTURES OF THE WORLD 3 credits

Survey of selected musical cultures in Southeast Asia, Africa, East Asia, the Middle East, and the folk music of Europe and the Americas. Classification of musical instruments, theoretical systems, scale structures, role of music in society, relationship of music to other arts in their cultures. Enroll Info: None
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: Fall 2013

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. Enroll Info: None
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. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2019

MUSIC/CURRIC 409 - STUDENT TEACHING IN GENERAL AND VOCAL MUSIC
6-12 credits.
Supervised student teaching in general and vocal K-12 settings. Enroll
Info: None
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: Fall 2020
MUSIC/CURRIC 410 - STUDENT TEACHING IN GENERAL AND INSTRUMENTAL MUSIC

6-12 credits

Supervised student teaching in general and instrumental K -12 settings.
Enroll Info: None
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: Fall 2020

## 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). Enroll Info: None
Requisites: MUSIC 212 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 2016
MUSIC 412 - SURVEY OF MUSIC IN THE RENAISSANCE 3 credits.

Major genres and composers of sacred and secular music (ca. 15th-16th centuries). Enroll Info: None
Requisites: MUSIC 212 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
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). Enroll Info: None
Requisites: MUSIC 212 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
MUSIC 414 - SURVEY OF MUSIC IN THE CLASSIC ERA 3 credits.

Major genres and composers in Western Europe (ca. 1750-1827). Enroll Info: None
Requisites: MUSIC 212 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

MUSIC 415 - SURVEY OF MUSIC IN THE ROMANTIC ERA
3 credits.
Major genres and composers in Europe (ca. 1820-1910). Enroll Info: None
Requisites: MUSIC 212 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 2019
MUSIC 416 - SURVEY OF MUSIC IN THE TWENTIETH CENTURY 3 credits.

Major genres and composers in Europe and the United States. Enroll Info: None
Requisites: MUSIC 212 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 2019
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 repertories, musical theater and opera, concert music, blues and jazz. Enroll Info: None
Requisites: MUSIC 212 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
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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020
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. Enroll Info: Audition and instructor consent required for students enrolling the first time
Requisites: MUSIC 461
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 2020
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. Enroll Info: None
Requisites: MUSIC PERF 144, 205, 505 or concurrent enrollment, or 705 or concurrent enrollment
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: Fall 2020
MUSIC 465 - MARCHING BAND TECHNIQUES
1 credit.
Exploration of methods and materials related to marching band teaching, philosophy, and performance. Enroll Info: None
Requisites: MUSIC 42 or declared in Music, Music: Education, or Music:
Performance (undergraduate or graduate programs)
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

## MUSIC 466 - DICTION FOR SINGERS

2 credits.
Italian, German, and French diction as related to vocal music; transcription into the International Phonetic Alphabet (IPA). Enroll Info:

## None

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 2020
MUSIC 467 - LANGUAGE DICTION FOR SINGING I
2 credits.
English, German, Italian, and French diction as related to vocal music.
Enroll Info: None
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 2019
MUSIC 468 - LANGUAGE DICTION FOR SINGING II
2 credits.
Continuation of English, German, Italian, and French diction as related to vocal music. Enroll Info: None
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
MUSIC 497 - SPECIAL TOPICS IN MUSIC
1-3 credits.
Exploration of wide-ranging topics in music history, music theory or music education. Enroll Info: None
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 2020

## MUSIC 499 - DIRECTED STUDY

1-3 credits
Individual research and projects with faculty. Enroll Info: 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: Fall 2020
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. Enroll Info:

## None

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
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. Enroll Info: None
Requisites: MUSIC 212 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
MUSIC 513 - SURVEY OF OPERA
3 credits.
Historical development of opera; investigation of main stylistic features of representative masterworks. Enroll Info: None
Requisites: MUSIC 212 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

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. Enroll Info: None
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 2012

## 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. Enroll Info: None
Requisites: MUSIC 222 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

## MUSIC 524 - ORCHESTRATION II

3 credits.

Continuation of study in orchestration and arranging. Enroll Info: None
Requisites: MUSIC 222 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 2015

## MUSIC/FOLKLORE 535 - AMERICAN FOLK AND VERNACULAR MUSIC

 3 credits.An ethnographic, historical examination of immigrant and indigenous "roots" musical genres (blues, hillbilly, powwow, polka, conjunto, etc.) in relation to technological, commercial, artistic, and socio-political forces in American life. Enroll Info: None
Requisites: Graduate/professional 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 2013

## MUSIC/ANTHRO/FOLKLORE/THEATRE 539 - THE FOLKLORE OF FESTIVALS AND CELEBRATIONS <br> 3 credits.

Survey of interdisciplinary literature on social/performative folklore aesthetics and environments by in-depth study of three festivals and ceremonies. Required field trips. Enroll Info: None
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 2014
MUSIC 540 - ADVANCED PEDAGOGY
2 credits.
Advanced pedagogical methods for performance. Enroll Info: None
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 2020
MUSIC 541 - SEMINAR IN CHORAL LITERATURE
2 credits.
Seminar in Choral Literature from Renaissance to the Present. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## MUSIC 542 - CHORAL LITERATURE AND PERFORMANCE PRACTICES OF TODAY <br> 2 credits.

Seminar in Choral Literature from Renaissance to the Present. Enroll Info: None
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 2020

MUSIC 543 - ADVANCED STRING PEDAGOGY
2 credits.
Survey of contemporary and historical string pedagogy with implications for multiple teaching settings and applied research. Enroll Info: None 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 2020
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. Enroll Info: None
Requisites: MUSIC 543
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 545 - PRACTICUM IN ADVANCED STRING PEDAGOGY
2 credits.
Provides opportunity for graduate students to teach privately or in small groups under faculty supervision. Enroll Info: None
Requisites: MUSIC 543
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

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. Enroll Info: None
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: No
Last Taught: Spring 2020

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. Enroll Info: None
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 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. Enroll Info: None Requisites: Senior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
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 2019
MUSIC 553 - ADVANCED CONDUCTING SEMINAR
2 credits.

Study/analysis of conducting techniques; score reading/interpretation of masterpieces from standard repertoire. Enroll Info: None
Requisites: MUSIC 254
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

MUSIC 554 - ADVANCED CONDUCTING
2 credits.
Continuation of study and analysis of conducting techniques and score reading. Enroll Info: None
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. Enroll Info: None
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

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. Enroll Info: 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 2020
MUSIC 558 - MADRIGAL SINGERS
1 credit.

Ensemble specializing in 16th and 17th century secular music. Enroll Info: 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 2020

## 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. Enroll Info: 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 2020

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. Enroll Info: None
Requisites: MUSIC 548
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## MUSIC 562 - JAZZ ENSEMBLE

1 credit.
Assignments in performing ensemble literature. Enroll Info: 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: Fall 2020
MUSIC 565 - ADVANCED ENSEMBLE-WOODWIND
1 credit.
Assignments in performing ensemble literature. Enroll Info: 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 2020
MUSIC 567 - ADVANCED ENSEMBLE-BRASS
1 credit.
Assignments in performing ensemble literature. Enroll Info: 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 2020

MUSIC 568 - ADVANCED ENSEMBLE-PERCUSSION
1 credit.
Assignments in performing ensemble literature. Enroll Info: 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 2020
MUSIC 569 - ADVANCED ENSEMBLE-STRING
1 credit.

Assignments in performing ensemble literature. Enroll Info: 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 2020

## MUSIC 570 - UNIVERSITY SYMPHONY ORCHESTRA

1 credit.
Performance plus additional study of performance practice and orchestral literature. Enroll Info: 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 2020
MUSIC 571 - CHAMBER ORCHESTRA
1 credit.
Rehearsal, study of performance of classical symphonic works of 19th and 20th century orchestra and concerto literature. Enroll Info: 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. Enroll Info: 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 2020

MUSIC 573 - CONTEMPORARY CHAMBER ENSEMBLE 1 credit.

Assignments in performing ensemble literature. Enroll Info: 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 2016
MUSIC 574 - WIND ENSEMBLE
1 credit.
Limited instrumentation for students having attained exceptional level of performance ability. Enroll Info: 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 2020

MUSIC 576 - CONCERT BAND
1 credit.
Rehearsal and performance from band literature; additional study of performance practice. Enroll Info: 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 2020

MUSIC 577 - CHORALE
1 credit.
Performance and study of choral chamber music. Enroll Info: 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: Fall 2019
MUSIC 578 - CONCERT CHOIR
1 credit.

Performance plus additional study of performance practice and choir literature. Enroll Info: 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 2020

## MUSIC 579 - MASTERS SINGERS

1 credit.

A group of select singers who study varied repertoire conducted by graduate students. Enroll Info: 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. Enroll Info: None
Requisites: Senior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

MUSIC/LIS 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. Enroll Info: None
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 2020

MUSIC 621 - RENAISSANCE POLYPHONY
3 credits.
Analysis and stylistic composition. Enroll Info: None
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 2017

MUSIC 622 - BAROQUE COUNTERPOINT
3 credits.

Analysis and stylistic composition. Enroll Info: None
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 2019
MUSIC 623 - FORM AND ANALYSIS
2-3 credits.

Study of modern analytical techniques; practice in analysis of representative works. Enroll Info: None
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 2020

MUSIC 624 - FORM AND ANALYSIS II
2-3 credits

Continuation of study of modern analytical techniques; practice in analysis of representative works. Enroll Info: None
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 2020

## MUSIC 681 - SENIOR HONORS THESIS

3 credits.
Mentored individual study and research for students in the major writing an honors thesis. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
MUSIC 751 - SEMINAR IN PIANO PEDAGOGY
3 credits.
Interpretive and technical approaches to advanced keyboard
performance. Enroll Info: None
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 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## MUSIC 791 - SEMINAR IN PIANO LITERATURE

3 credits.
Applied piano literature including representative works from all periods. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: 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 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. Enroll Info: None
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
MUSIC 799 - INDEPENDENT WORK
1-3 credits.
Faculty-mentored individual study and research. Enroll Info: None
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

## 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. Enroll Info: None
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
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. Enroll Info: None 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. Enroll Info: None

Requisites: 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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/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. Enroll Info: None Requisites: 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. Enroll Info: None
Requisites: 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 923 - SEMINAR IN NOTATION
3 credits.
Notational systems, their history, interpretation and significance with special reference to development of Western notation. Enroll Info: None Requisites: 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. Enroll Info: None
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. Enroll Info: None
Requisites: 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. Enroll Info: None
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
MUSIC 990 - MASTERS THESIS
1-4 credits.
Individual research study with faculty mentor for writing thesis. Enroll Info: None
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
MUSIC 999 - PHD DISS/DMA PROJECT
1-3 credits
Individual research study with faculty mentor. Enroll Info: None
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: Fall 2020

## MUSIC-PERFORMANCE (MUS PERF)

MUS PERF 7 - FUNDAMENTALS-FLUTE
1 credit.
Exploration of the fundamentals of the flute. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Fall 2020

MUS PERF 12 - FUNDAMENTALS: DOUBLE REEDS
1 credit.
Exploration of the fundamentals of the double reed instruments: oboe and bassoon. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Spring 2020
MUS PERF 14 - FUNDAMENTALS: SINGLE REEDS
1 credit.
Exploration of the fundamentals of single reed instruments: saxophone and clarinet. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Fall 2020
MUS PERF 18 - FUNDAMENTALS-HIGH BRASS
1 credit.

Exploration of the fundamentals of the high brass instruments: trumpet and French horn. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Spring 2020
MUS PERF 24 - FUNDAMENTALS-LOW BRASS
1 credit.
Exploration of the fundamentals of the low brass instruments: trombone, euphonium and tuba. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Fall 2020
MUS PERF 27 - FUNDAMENTALS-PERCUSSION
1 credit.
Exploration of the fundamentals of the percussion. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Spring 2020
MUS PERF 32 - FUNDAMENTALS-HIGH STRINGS
1 credit.
Exploration of the fundamentals of the high string instruments: violin and viola. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Fall 2020

## MUS PERF 36 - FUNDAMENTALS-LOW STRINGS

1 credit.
Exploration of the fundamentals of the low stringed instruments: violoncello and double bass. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Repeatable for Credit: No
Last Taught: Fall 2020

## MUS PERF 44 - STUDY ABROAD: BEGINNING INSTRUCTION IN MUSIC PERFORMANCE <br> 1 credit.

Beginning class or private music performance instruction taken in a UWMadison resident study abroad program. Enroll Info: Enrollment in a UWMadison 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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: Spring 2020
MUS PERF 55 - BASIC BASSOON
1-2 credits.
Individual instruction in bassoon performance at the basic level. Enroll Info: 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. Enroll Info: 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.
Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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 2017
MUS PERF 67 - BASIC PERCUSSION
1-2 credits.

Individual instruction in percussion performance at the basic level. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 67
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2012
MUS PERF 71 - BASIC VIOLIN
1-2 credits.
Individual instruction in violin performance at the basic level. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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. Enroll Info: 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: Fall 2020
MUS PERF 77 - BASIC STRING BASS
1-2 credits
Individual instruction in string bass performance at the basic level. Enroll Info: 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 2019
MUS PERF 79 - BASIC HARP
1-2 credits.
Private instruction in harp performance at the introductory level. Enrol Info: 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. Enroll Info: Students should contact the department for placement information prior to enrolling
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## MUS PERF 102 - BEGINNING CLASS PIANO

2 credits.
Continuation of group instruction in beginning piano. Enroll Info: Students who have not completed MUSIC 101 should contact the department for placement information prior to enrolling
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

MUS PERF 103 - ELEMENTARY CLASS PIANO
2 credits.
Group instruction in elementary piano. Enroll Info: None
Requisites: MUS PERF 102 and declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
MUS PERF 104 - INTERMEDIATE CLASS PIANO
2 credits.
Group instruction in intermediate piano. Enroll Info: None
Requisites: MUS PERF 103 and declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: MUS PERF 102 and declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
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. Enroll Info: This course is intended for students who are not music majors or to music majors intending instrumental 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: Fall 2020
MUS PERF 147 - FIRST YEAR COMPOSITION
3 credits.
Individual instruction in music composition at the beginning level. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: None

Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
MUS PERF 200 - ELEMENTARY/INTERMEDIATE PIANO FOR NON-PIANO MAJORS
2 credits.
Individual piano instruction for non-piano majors. Enroll Info: None
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 2020

MUS PERF 201 - ELEMENTARY/INTERMEDIATE PIANO
2-4 credits.
Individual piano instruction for piano majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 202 - ELEMENTARY/INTERMEDIATE HARPSICHORD
2-4 credits.

Introduction to basic harpsichord technique, continuo realization and intermediate-level repertoire. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 202
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 2017
MUS PERF 203 - ELEMENTARY/INTERMEDIATE ORGAN
2-4 credits

Individual organ instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2019

MUS PERF 205 - ELEMENTARY/INTERMEDIATE VOICE
2-4 credits.
Individual voice instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 207 - ELEMENTARY/INTERMEDIATE FLUTE
2-4 credits.

Individual flute instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 209 - ELEMENTARY/INTERMEDIATE OBOE
2-4 credits
Individual oboe instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 211 - ELEMENTARY/INTERMEDIATE CLARINET 2-4 credits.

Individual clarinet instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 213 - ELEMENTARY/INTERMEDIATE SAXOPHONE 2-4 credits

Individual saxophone instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 215 - ELEMENTARY/INTERMEDIATE BASSOON 2-4 credits.

Individual bassoon instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 217 - ELEMENTARY/INTERMEDIATE HORN 2-4 credits.

Individual horn instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs 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 2020

MUS PERF 219 - ELEMENTARY/INTERMEDIATE TRUMPET
2-4 credits
Individual trumpet instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 221 - ELEMENTARY/INTERMEDIATE TROMBONE
2-4 credits.

Individual trombone instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

## MUS PERF 223 - ELEMENTARY/INTERMEDIATE EUPHONIUM

 2-4 creditsIndividual euphonium instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 225 - ELEMENTARY/INTERMEDIATE TUBA
2-4 credits
Individual tuba instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 227 - ELEMENTARY/INTERMEDIATE PERCUSSION
2-4 credits.
ndividual percussion instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 231 - ELEMENTARY/INTERMEDIATE VIOLIN 2-4 credits.

Individual violin instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 233 - ELEMENTARY/INTERMEDIATE VIOLA 2-4 credits.

Individual viola instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020

MUS PERF 235 - ELEMENTARY/INTERMEDIATE CELLO 2-4 credits.

Individual cello instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 237 - ELEMENTARY/INTERMEDIATE STRING BASS 2-4 credits.

Individual string bass instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or
classified as an intended major for one of these programs
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 2020
MUS PERF 239 - ELEMENTARY/INTERMEDIATE HARP 2-4 credits.

Individual harp instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or
classified as an intended major for one of these programs
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

MUS PERF 240 - ELEMENTARY/INTERMEDIATE GUITAR
2-4 credits.
Individual guitar instruction for majors. Enroll Info: None
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs
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 2020
MUS PERF 242 - ACCOMPANYING
2 credits.
Individual instruction in collaborative musical performance. Enroll Info:
None
Requisites: MUS PERF 201 or 203
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
MUS PERF 247 - SECOND YEAR COMPOSITION
3 credits.
Individual instruction in music composition. Enroll Info: None
Requisites: MUS PERF 148
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
MUS PERF 248 - SECOND YEAR COMPOSITION
3 credits.
Continuation of individual instruction in music composition. Enroll Info:

## None

Requisites: MUS PERF 247
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
MUS PERF 251 - KEYBOARD SKILLS
2 credits.
Keyboard skills for the piano major. Enroll Info: None
Requisites: Concurrent enrollment in MUS PERF 201 or 203
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
MUS PERF 301 - ADVANCED TECHNIQUES: PIANO
1-2 credits.
Performance study topics as assigned for piano. Enroll Info: None
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

MUS PERF 311 - ADVANCED TECHNIQUES: CLARINET
1-2 credits.
Performance study topics as assigned for clarinet. Enroll Info: None
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 2018
MUS PERF 315 - ADVANCED TECHNIQUES: BASSOON 1-2 credits.

Performance study topics as assigned for bassoon. Enroll Info: None 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 2012
MUS PERF 327 - ADVANCED TECHNIQUES: PERCUSSION 1-2 credits.

Performance study topics as assigned for percussion. Enroll Info: None 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

MUS PERF 331 - ADVANCED TECHNIQUES: VIOLIN
1-2 credits.
Performance study topics as assigned for violin. Enroll Info: None
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 2015
MUS PERF 333 - ADVANCED TECHNIQUES: VIOLA
1-2 credits.
Performance study topics as assigned for viola. Enroll Info: None
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 2018
MUS PERF 335 - ADVANCED TECHNIQUES: CELLO 1-2 credits.

Performance study topics as assigned for cello. Enroll Info: None 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 2012

MUS PERF 339 - ADVANCED TECHNIQUES: HARP
1-2 credits.
Performance study topics as assigned for harp. Enroll Info: None
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 2020
MUS PERF 342 - PIANO ACCOMPANYING LAB
1 credit.
Laboratory in piano accompanying for piano emphasis majors and doctoral minors. Enroll Info: None
Requisites: MUS PERF 201
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

MUS PERF 347 - THIRD YEAR COMPOSITION
3 credits.
Individual instruction in music composition. Enroll Info: None
Requisites: MUS PERF 248
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
MUS PERF 348 - THIRD YEAR COMPOSITION
3 credits.
Continuation of individual instruction in music composition. Enroll Info:
None
Requisites: MUS PERF 347
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2019
MUS PERF 401 - ADVANCED PIANO
2-4 credits.
Individual piano instruction for undergrad piano majors and doctoral minors. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 401
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 2020

## 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. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 402
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 2020
MUS PERF 403 - ADVANCED ORGAN
2-4 credits
Advanced individual organ instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 403
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 2020
MUS PERF 405 - ADVANCED VOICE
2-4 credits.
Advanced individual voice instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 405
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 2020
MUS PERF 407 - ADVANCED FLUTE
2-4 credits.
Advanced individual flute instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 407
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 2020
MUS PERF 409 - ADVANCED OBOE
2-4 credits.

Advanced individual oboe instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 409
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 2020

## MUS PERF 411 - ADVANCED CLARINET

2-4 credits.
Advanced individual clarinet instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 411
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 2020
MUS PERF 413 - ADVANCED SAXOPHONE
2-4 credits.

Advanced individual saxophone instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 413
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 2020

## MUS PERF 415 - ADVANCED BASSOON

2-4 credits.

Advanced individual bassoon instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 415
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 2020
MUS PERF 417 - ADVANCED HORN
2-4 credits.

Advanced individual horn instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 417
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 2020
MUS PERF 419 - ADVANCED TRUMPET
2-4 credits.
Advanced individual trumpet instruction. Enroll Info: 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: Fall 2020

## MUS PERF 421 - ADVANCED TROMBONE

2-4 credits.
Advanced individual trombone instruction. Enroll Info: 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: Fall 2020

MUS PERF 423 - ADVANCED EUPHONIUM
2-4 credits

Advanced individual instruction in euphonium. Enroll Info: 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: Fall 2020

## MUS PERF 425 - ADVANCED TUBA

2-4 credits

Advanced individual tuba instruction. Enroll Info: 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: Fall 2020
MUS PERF 427 - ADVANCED PERCUSSION
2-4 credits

Advanced individual percussion instruction. Enroll Info: 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: Fall 2020
MUS PERF 431 - ADVANCED VIOLIN
2-4 credits
Advanced individual violin instruction. Enroll Info: 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: Fall 2020

## MUS PERF 433 - ADVANCED VIOLA

2-4 credits.
Advanced individual viola instruction. Enroll Info: 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: Fall 2020

MUS PERF 435 - ADVANCED CELLO
2-4 credits.

Advanced individual cello instruction. Enroll Info: 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: Fall 2020

## MUS PERF 437 - ADVANCED STRING BASS

2-4 credits.

Advanced individual string bass instruction. Enroll Info: Instructor consent is required for students enrolling for the first time.
Requisites: MUS PERF 437
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 2020
MUS PERF 439 - ADVANCED HARP
2-4 credits.

Advanced individual harp instruction. Enroll Info: 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: Fall 2020
MUS PERF 440 - ADVANCED GUITAR
2-4 credits

Advanced individual classical guitar instruction. Enroll Info: 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: Fall 2020

MUS PERF 447 - FOURTH YEAR COMPOSITION 3 credits.

Advanced individual instruction in music composition. Enroll Info: None
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 2019
MUS PERF 448 - FOURTH YEAR COMPOSITION
3 credits.

Continuation of advanced individual instruction in music composition. Enroll Info: None
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: Spring 2020
MUS PERF 457 - JAZZ COMPOSITION AND ARRANGING 3 credits.

Study of music composition and arranging in the jazz idiom. Enroll Info: Students will audition for placement prior to the beginning of the semester
Requisites: Declared in Music, Music: Performance or Music Education or classified as an intended major for one of these programs; 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 2020
MUS PERF 458 - JAZZ COMPOSITION AND ARRANGING
3 credits.
Continuation of music composition and arranging in the jazz idiom. Enroll Info: None
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 2020

## MUS PERF 499 - SENIOR RECITAL

2 credits.
Preparation and public performance of a senior-level recital. Enroll Info: None
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: Fall 2020

MUS PERF 501 - MASTERS LEVEL-PIANO
4 credits.
Masters level individual piano instruction. Enroll Info: None
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 2020
MUS PERF 503 - MASTERS LEVEL-ORGAN
4 credits.

Masters level individual organ instruction. Enroll Info: None
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 2013

## MUS PERF 505 - MASTERS LEVEL-VOICE

4 credits.
Masters level individual voice instruction. Enroll Info: None 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 2020

## MUS PERF 507 - MASTERS LEVEL-FLUTE

4 credits.
Masters level individual flute instruction. Enroll Info: None 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 2020
MUS PERF 509 - MASTERS LEVEL-OBOE
4 credits.
Masters level individual oboe instruction. Enroll Info: None 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 2013

## MUS PERF 511 - MASTERS LEVEL-CLARINET

 4 credits.Masters level individual clarinet instruction. Enroll Info: None 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 2020

MUS PERF 513 - MASTERS LEVEL-SAXOPHONE 4 credits.

Masters level individual saxophone instruction. Enroll Info: None
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 2020

MUS PERF 515 - MASTERS LEVEL-BASSOON
4 credits.
Masters level individual bassoon instruction. Enroll Info: None 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 2020

MUS PERF 517 - MASTERS LEVEL-HORN
4 credits

Masters level individual horn instruction. Enroll Info: None 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 2015

MUS PERF 519 - MASTERS LEVEL-TRUMPET
4 credits.

Masters level individual trumpet instruction. Enroll Info: None 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 2020

MUS PERF 521 - MASTERS LEVEL-TROMBONE
4 credits.

Masters level individual trombone instruction. Enroll Info: None 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 2020
MUS PERF 523 - MASTERS LEVEL-EUPHONIUM
4 credits.

Masters level individual euphonium instruction. Enroll Info: None
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 2020

MUS PERF 525 - MASTERS LEVEL-TUBA
4 credits.
Masters level individual tuba instruction. Enroll Info: None 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 2020

MUS PERF 527 - MASTERS LEVEL-PERCUSSION
4 credits

Masters level individual percussion instruction. Enroll Info: None 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 2020

MUS PERF 531 - MASTERS LEVEL-VIOLIN
4 credits.

Masters level individual violin instruction. Enroll Info: None 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 2020

MUS PERF 532 - ADVANCED CONDUCTING
3-4 credits.
Masters level individual conducting instruction. Enroll Info: None 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 2020

MUS PERF 533 - MASTERS LEVEL-VIOLA
4 credits.

Masters level individual viola instruction. Enroll Info: None
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 2020

MUS PERF 535 - MASTERS LEVEL-CELLO
4 credits.
Masters level individual individual cello instruction. Enroll Info: None 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 2020

MUS PERF 540 - MASTERS LEVEL-GUITAR
4 credits.
Masters level individual classical guitar instruction. Enroll Info: None
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 2020
MUS PERF 542 - ADVANCED ACCOMPANYING
2-3 credits.
Individual instruction in advanced level collaborative musical performance. Enroll Info: None
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 2020

MUS PERF 547 - MASTERS LEVEL COMPOSITION
3 credits.
Private composition at the master's degree level. Enroll Info: None
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 2020
MUS PERF 548 - MASTERS LEVEL COMPOSITION
3 credits.

Private composition at the master's degree level. Enroll Info: None
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 2017
MUS PERF 561 - ORGAN IMPROVISATION AND LITURGY
2 credits.
Development of organ improvisation skills; survey of liturgical practices and styles. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
MUS PERF 562 - ORGAN IMPROVISATION AND LITURGY
2 credits.
Continued development of organ improvisation skills. Enroll Info: None Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
MUS PERF 701 - DOCTORAL LEVEL-PIANO
4 credits.
Individual piano instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 703 - DOCTORAL LEVEL-ORGAN
4 credits.
Individual organ instruction at the doctoral level. Enroll Info: None
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: Fall 2020

MUS PERF 705 - DOCTORAL LEVEL-VOICE 4 credits

Individual voice instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 707 - DOCTORAL LEVEL-FLUTE 4 credits.

Individual flute instruction at the doctoral level. Enroll Info: None 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: Fall 2020

MUS PERF 709 - DOCTORAL LEVEL-OBOE
4 credits.
Individual oboe instruction at the doctoral level. Enroll Info: None 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 2019

MUS PERF 711 - DOCTORAL LEVEL-CLARINET
4 credits.
Individual clarinet instruction at the doctoral level. Enroll Info: None
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 2020
MUS PERF 713 - DOCTORAL LEVEL-SAXOPHONE 4 credits.

Individual saxophone instruction at the doctoral level. Enroll Info: None
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 2019

MUS PERF 715 - DOCTORAL LEVEL-BASSOON
4 credits.
Individual bassoon instruction at the doctoral level. Enroll Info: None 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: Fall 2020

MUS PERF 717 - DOCTORAL LEVEL-HORN
4 credits
Individual horn instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 719 - DOCTORAL LEVEL-TRUMPET
4 credits.
Individual trumpet instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 721 - DOCTORAL LEVEL-TROMBONE
4 credits.
Individual trombone instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 725 - DOCTORAL LEVEL TUBA
4 credits
Individual tuba instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 727 - DOCTORAL LEVEL PERCUSSION
4 credits.
Individual percussion instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 731 - DOCTORAL LEVEL-VIOLIN
4 credits.
Individual violin instruction at the doctoral level. Enroll Info: None 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: Fall 2020

MUS PERF 732 - DOCTORAL LEVEL CONDUCTING 2 credits.

Individual conducting instruction at the doctoral level. Enroll Info: None
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: Fall 2020
MUS PERF 733 - DOCTORAL LEVEL-VIOLA
4 credits.
Individual viola instruction at the doctoral level. Enroll Info: None 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 2020

MUS PERF 735 - DOCTORAL LEVEL-CELLO
4 credits.
Individual cello instruction at the doctoral level. Enroll Info: None 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: Fall 2020

MUS PERF 740 - DOCTORAL LEVEL-GUITAR
4 credits.
Individual guitar instruction at the doctoral level. Enroll Info: None
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: Fall 2020

## MUS PERF 742 - DOCTORAL LEVEL PRIVATE INSTRUCTION IN ACCOMPANYING <br> 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. Enroll Info: None
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 2019

MUS PERF 747 - DOCTORAL LEVEL COMPOSITION
3 credits.
Doctoral level composition. Enroll Info: None
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: Fall 2020

MUS PERF 748 - DOCTORAL LEVEL COMPOSITION
3 credits.
Doctoral level composition. Enroll Info: None
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. Enroll Info:
None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## 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.
Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2016

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Spring 2020

## NAV SCl 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. Enroll Info: None
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 2020
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 nonROTC students on a space available basis, with consent of instructor. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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, electrooptics, computers, missile, and electronic warfare systems. Open to nonROTC students on a space available basis, with consent of instructor. Enroll Info: None
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: Spring 2020

## NAV SCl 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. Enroll Info: 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 2020

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None

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
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: None
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 2020

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Enrolled in Naval ROTC program
Repeatable for Credit: No
Last Taught: Spring 2019

## NEUROLOGICAL SURGERY <br> (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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

NEUROL/NTP 735 - NEUROBIOLOGY OF DISEASE
2 credits.

Seminar course relating major categories of human neurological and opthalmological disease to fundamental topics in neurobiology. Enrol Info: None
Requisites: Graduate/professional standing and NTP/NEURODPT 610 Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2020

## NEUROL 910 - INDEPENDENT READING AND RESEARCH FOR FOURTH YEAR MEDICAL STUDENTS <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2020

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). Enroll Info: None 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 2020

## 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. Enroll Info: None
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

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. Enroll Info: None 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 533 - MOLECULAR PHYSIOLOGY

2 credits.
This course will introduce funtional aspects of mammalian organ systems from a molecular perspective. Human diseases will receive a special emphasis, and diseases will be used to illustrate the connection between molecules and biological function. Enroll Info: CHEM 103 104 or 109 or 115 116; PHYSICS 201202 or 207 208; ZOOLOGY/ BIOLOGY/BOTANY 151152 or Biocore 303 304; MATH 221222 or 275 276. Recommended but not required: Biocore 323, biochem (e.g. BIOCHEM 507 508), cell biology (e.g. ZOOLOGY 570)
Requisites: Graduate/professional standing or (CHEM 104, 109, or 116 and PHYSICS 202 or 208 and BOTANY/BIOLOGY/ZOOLOGY 151 and 152 or BIOCORE 383)
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

## 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 receptorrs, synaptic transmission and sensory transduction. Lectures supplemented with experimental demonstrations and discussion sessions. Enroll Info: Zoo 523 or equiv
Requisites: Graduate/professional standing or (BOTANY/BIOLOGY/ ZOOLOGY 151 or BIOLOGY/ZOOLOGY 101 or BIOCORE 485) and (CHEM 103, 104, or 109) and (PHYSICS 202, 208, or 248)
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 2020
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. Enroll Info: None
Requisites: NEURODEPT 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 2020

## NEURODPT/NTP/ZOOLOGY 616 - LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR <br> 4 credits.

Students will do three independent experimental modules exploring neurophysiology and behavior, each taking 4-5 weeks. Students will work in groups of 2 or 3 and will learn techniques and then develop their own short investigations into each of three separate areas of neurobiology. There will be continual interaction between students and faculty. Enroll Info: PSYCH/ZOOLOGY 523 and PHYSIO /ZOOLOGY 524 or PHMCOL-M/ PHYSIOL 610 and PHMCOL-M/PSYCH/NEURODPT/NTP 611
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: Spring 2017

## NEURODPT/NTP 629 - MOLECULAR AND CELLULAR MECHANISMS OF MEMORY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing or ANAT\&PHY 335, 435, PHYSIOL 335, 435 or 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 2020
NEURODPT/NTP 630 - NEURONAL MECHANISMS FOR SENSATION AND MEMORY IN CEREBRAL CORTEX
3 credits
Current literature will be considered in lectures and discussions that provides insight into how the cerebral cortex processes sensory information to generate and store cogent representations of the external world. The course includes laboratory exercises and demonstrations. Enroll Info: None
Requisites: PHMCOL-M/PSYCH/NEURODPT/NTP 611, MED SC-M 731, COMP BIO 505, ZOOLOGY/PSYCH 523, PSYCH 454, 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 2017

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101, 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 2019

## NEURODPT 675 - SELECTED TOPICS IN PHYSIOLOGY

1-3 credits
Each topic taught once every two years: advanced cardiovascular physiology, advanced respiratory physiology, advanced endocrinology, membrane transport physiology and neurobiology. Enroll Info: None
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 - INDEPENDENT WORK
1-4 credits.

Independent work. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
NEURODPT 700 - CYTOSKELETAL DYNAMICS
2 credits.
Course content is topical and current. The course covers such issues as microtubule dynamics, microtubule-associated proteins, microtubule-organizing centers, actin filaments, actin regulatory proteins, intermediate filaments, cell motility, mitosis, process outgrowth, and cell differentiation. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

## NEURODPT 747 - SENSORY AND MOTOR SYSTEMS

2 credits.
Neural pathways that underlie normal sensory and motor function, and how these functions are disrupted then the pathways are damaged. Build upon the introduction to the nervous system from previous coursework and will specifically focus on a more complete description of the functional, basic science details of the nervous system's sensory and motor components. Combines basic and clinical neuroscience and clinical application of basic science principles. Enroll Info: None
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 2020
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
NEURODPT 990 - RESEARCH AND THESIS
1-9 credits.
Enroll Info: None
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

## NEUROSCIENCE TRAINING <br> 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 receptorrs, synaptic transmission and sensory transduction. Lectures supplemented with experimental demonstrations and discussion sessions. Enroll Info: Zoo 523 or equiv Requisites: Graduate/professional standing or (BOTANY/BIOLOGY/ ZOOLOGY 151 or BIOLOGY/ZOOLOGY 101 or BIOCORE 485) and (CHEM 103, 104, or 109) and (PHYSICS 202, 208, or 248)
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 2020

## 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. Enroll Info: None
Requisites: NEURODEPT 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 2020

## NTP/NEURODPT/ZOOLOGY 616 - LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR <br> 4 credits.

Students will do three independent experimental modules exploring neurophysiology and behavior, each taking 4-5 weeks. Students will work in groups of 2 or 3 and will learn techniques and then develop their own short investigations into each of three separate areas of neurobiology. There will be continual interaction between students and faculty. Enroll Info: PSYCH/ZOOLOGY 523 and PHYSIO /ZOOLOGY 524 or PHMCOL-M/ PHYSIOL 610 and PHMCOL-M/PSYCH/NEURODPT/NTP 611
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: 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. Enroll Info: Jr st; college level elem crse in biology or psych
Requisites: Junior standing; not open to special students
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. Enroll Info: Introductory biology. Background in neuroscience strongly recommended
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: Spring 2020

## NTP/NEURODPT 629 - MOLECULAR AND CELLULAR MECHANISMS OF MEMORY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing or ANAT\&PHY 335, 435, PHYSIOL 335, 435 or 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 2020

## NTP/NEURODPT 630 - NEURONAL MECHANISMS FOR SENSATION AND MEMORY IN CEREBRAL CORTEX

3 credits.
Current literature will be considered in lectures and discussions that provides insight into how the cerebral cortex processes sensory information to generate and store cogent representations of the external world. The course includes laboratory exercises and demonstrations. Enroll Info: None

Requisites: PHMCOL-M/PSYCH/NEURODPT/NTP 611, MED SC-M 731, COMP BIO 505, ZOOLOGY/PSYCH 523, PSYCH 454, 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 2017

## NTP/MED PHYS 651 - METHODS FOR NEUROIMAGING RESEARC

 3 creditsProvides 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. Enroll Info: None

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 2020

## NTP 660 - NEUROSCIENCE \& PUBLIC POLICY SEMINAR

1-2 credits
A graduate level seminar open to advanced undergraduates with consent of instructor. Covers various topics in neuroscience and in the related sciences in lectures that demonstrate the interaction between science and public policy. Enroll Info: Undergraduates: a background in neuroscience, (ZOOLOGY/PSYCH 523 and 524, or Biocore 323 or Neurosci 610 and 611). Grad st in the Neuroscience Training Program or in the Neuroscience and Public Policy Program
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (PSYCH 454 and ZOOLOGY/PSYCH 523) or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## NTP 670 - STEM CELLS AND THE CENTRAL NERVOUS SYSTEM

 2-3 creditsAmong 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. Enroll Info: BIOCHEM 501 or equiv. Grad stdts in the sciences or adv undergrads with cons inst
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: No
Last Taught: Fall 2019
NTP 675 - SPECIAL TOPICS
1-3 credits
Enroll Info: Variable
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 2020

## NTP 677 - BASIC SLEEP MECHANISMS AND SLEEP DISORDERS: FROM NEUROBIOLOGY TO SLEEP MEDICINE <br> 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. Enroll Info: None
Requisites: PSYCH 454 and ZOOLOGY/PSYCH 523; or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020

## NTP 700 - PROFESSIONAL DEVELOPMENT FOR BIOMEDICAL

 GRADUATE STUDENTS1 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## NTP/NEUROL 735 - NEUROBIOLOGY OF DISEASE

2 credits.

Seminar course relating major categories of human neurological and opthalmological disease to fundamental topics in neurobiology. Enroll Info: None
Requisites: Graduate/professional standing and NTP/NEURODPT 610 Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
NTP 900 - NEUROSCIENCE SEMINAR: CURRENT TOPICS IN NEUROBIOLOGY

1 credit.

Critical review of selected topics in neurobiology. Enroll Info: Cons inst
Requisites: Declared in Neuroscience program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
NTP 990 - RESEARCH AND THESIS
1-12 credits.
Enroll Info: Grad st in Neurosci
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

## NUCLEAR ENGINEERING (N E)

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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## N E 231 - SURVEY OF NUCLEAR ENGINEERING

1 credit.

Consideration of work done by nuclear engineers; relevance of nuclear energy to society; environmental and other problems. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2018

## N E 234 - PRINCIPLES AND PRACTICE OF NUCLEAR REACTOR OPERATIONS <br> 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. Enroll Info: None
Requisites: Declared in Nuclear Engineering
Repeatable for Credit: No
Last Taught: Fall 2019
N E 305 - FUNDAMENTALS OF NUCLEAR ENGINEERING
3 credits
Properties of nuclei, nuclear structure, radioactivity, nuclear reactions, fission, resonance reactions, moderation of neutrons. Enroll Info: None 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 2020

## 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. Enroll Info: None
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 2020

## N E 406 - NUCLEAR REACTOR ANALYSIS

3 credits.

The neutronics behavior of fission reactors, both from a theoretica 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. Enroll Info: None

Requisites: N E 405, graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2019

## N E 408 - IONIZING RADIATION

3 credits.
Sources, interactions, and detection of ionizing radiation. Biological effects, shielding, standards of radiation protection. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: N E 305, M E 361, and (M E 363 and M E 364 or CBE/
B M E 320) or graduate/professional standing, or member of Engineering Guest Students

Repeatable for Credit: No
Last Taught: Fall 2020
N E 412 - NUCLEAR REACTOR DESIGN
5 credits.
Reactor design projects, reactor hazards, economics. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None Requisites: M S \& E 350 or 351, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: M S \& E 350 or 351, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Spring 2019

## N E 427 - NUCLEAR INSTRUMENTATION LABORATORY

2 credits.
Experiments on nuclear instrumentation, counting, data analysis. Enroll Info: None
Requisites: N E 305 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 2020
N E 428 - NUCLEAR REACTOR LABORATORY
2 credits.
Experiments on reactor operation, flux measurement, measurements of reactor parameters, using pool type reactor. Enroll Info: None
Requisites: NE 405 and NE 427, or graduate/professional standing
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: M S \& E 330, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or 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. Enroll Info: None
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. Enroll Info: None
Requisites: N E 305 and (N E 405, N E 408, PHYSICS/B M E/H ONCOL/ MED PHYS 501 or 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 2020

## 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. Enroll Info: None Requisites: M E 361 and (M E 364 or B M E/CBE 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: Fall 2019
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 processing plasmas. Enroll Info:

## None

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: Fall 2020

## 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. Enroll Info: None
Requisites: 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\&S Credit - Counts 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

## 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. Enroll Info: None
Requisites: 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2019

## N E 536 - FEASIBILITY ST OF POWER FROM CONTROLLED THERMONUCLEAR FUSION <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None

Requisites: M S \& E 350 or 351, 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 2019

## 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. Enroll Info: None Requisites: N E 405 and 411, or graduate/professional standing, or member of Engineering Guest Students
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2020

## N E 571 - ECONOMIC AND ENVIRONMENTAL ASPECTS OF NUCLEAR ENERGY <br> 3 credits.

Economics of the nuclear fuel cycle. Economic and environmental impact the nuclear fuel cycle. Impact on design, plant siting and regulation.
Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## N E/I SY E 574 - METHODS FOR PROBABILISTIC RISK ANALYSIS OF NUCLEAR POWER PLANTS <br> 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, 224, 324, or 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 2018

## N E 602 - SPECIAL TOPICS IN REACTOR ENGINEERING

 0-3 credits.Special Topics in Reactor Engineering. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## N E 699 - ADVANCED INDEPENDENT STUDY

0-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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 2020

## 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 multigroup model, one-group equations, energy-averaged constants, discrete ordinates, and Monte Carlo methods. Perturbation theory and variational techniques for practical problems. Enroll Info: 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 2017

## N E/C\&E SOC/I SY 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. Enroll Info: None
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. Enroll Info: 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 2020

## 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. Enroll Info: 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 2019

## 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. Enroll Info: 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 2020

## 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 Bremstrahlung, Cerenkov, and Synchrotron radiation; Thomson scattering of electromagnetic waves by charged particles. Enroll Info: 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 <br> 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. Enroll Info: None
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. Enroll Info: None 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

## N E 890 - PRE-DISSERTATOR'S RESEARCH

1-9 credits
Research by the Ph.D. students prior to becoming dissertators. Enroll Info: None
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

N E 903 - SPECIAL TOPICS-PLASMA PHYSICS
0-3 credits.

Special Topics in Plasma Physics. Enroll Info: 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 2020
N E/E C E/PHYSICS 922 - SEMINAR IN PLASMA PHYSICS
0-1 credits.

Current topics in plasma physics. Enroll Info: None
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

## N E 990 - RESEARCH AND THESIS

1-6 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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
N E 999 - ADVANCED INDEPENDENT STUDY
1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None 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

## NURSING (NURSING)

NURSING 100 - INTRODUCTION TO THE NURSING PROFESSION 1 credit.

Introduction to the breadth of careers and educational pathways in the nursing profession. Students explore personal interests, capacities, and career goals in relation to nursing career options. Enroll Info: PRN classification or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2017

## NURSING/S\&A PHM/SOC WORK 105 - HEALTH CARE SYSTEMS: INTERDISCIPLINARY APPROACH <br> 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. Enroll Info: None
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 2020
NURSING 212 - HUMAN RESPONSES TO HEALTH AND ILLNESS I 4 credits.

Builds on students' previous work in the biological sciences, social sciences and the humanities. Introduces the physiological, psychosocial and cultural basis of health and the role of the nurse in promoting optimum function and well-being. Enroll Info: None
Requisites: Admitted to undergraduate Nursing program
Repeatable for Credit: No
Last Taught: Fall 2016

## NURSING 219 - CLINICAL NURSING I

3-4 credits.
Beginning practice of nursing in laboratory and selected health care settings. Enroll Info: Nurs 212 or con reg; Nurs 301 or con reg; Chld Fam 362 or 363 or equiv, or con reg; or cons inst
Requisites: Admitted to undergraduate Nursing program
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2016

## NURSING 299 - INDEPENDENT READING

1-3 credits.

Enroll Info: Sophomore, Junior, or Senior standing consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
NURSING 301 - HEALTH HISTORY AND PATIENT ASSESSMENT
3 credits.
Basic techniques of writing a health history and conducting a routine assessment of a patient's health status. Enroll Info: NUR, NRN or PA classif; Anat 328 or equiv or con reg; Physiol 335 or equiv or con reg; or cons inst
Requisites: Declared in Nursing program, Registered Nurse program, or Nursing Collaborative program
Repeatable for Credit: No
Last Taught: Fall 2016
NURSING 302 - INTRODUCTION TO SYSTEMATIC INVESTIGATION
3 credits.
Characteristics of qualitative and quantitative data and research process; analysis and evaluation of patient data and published nursing studies.

## Enroll Info: None

Requisites: Declared in Nursing program or Registered Nurse program
Repeatable for Credit: No
Last Taught: Spring 2018
NURSING 310 - MENTAL HEALTH AND MENTAL ILLNESS:
IMPLICATIONS FOR NURSING
3 credits.
Theoretical foundations for nursing care; role of the nurse in community mental health settings, hospital settings, and psychiatric therapies. Enroll Info: Chld Fam 362 or 363 or equiv, or cons inst
Requisites: Admitted to undergraduate Nursing program
Repeatable for Credit: No
Last Taught: Fall 2017
NURSING 312 - HUMAN RESPONSES TO HEALTH AND ILLNESS II 4 credits.

Focus is on human responses to adult illnesses. Those adult illnesses that are highly prevalent or can induce potentially life-threatening human responses will be emphasized. Enroll Info: Nurs 212, phmcol or con reg, pathophysiol or con reg, Nurs 219 or con reg
Requisites: Admitted to undergraduate Nursing program
Repeatable for Credit: No
Last Taught: Spring 2017

## NURSING 313 - FOUNDATIONS OF NURSING PRACTICE

 2-3 creditsFocuses 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 as students gain confidence with applying the nursing process and begin to develop clinical judgment and assessment skills. This course complements a companion experiential course (NURSING 316), in which students provide holistic, safe therapeutic care in community and acute-care settings. Enroll Info: None
Requisites: Declared in Nursing or Nursing (Accelerated Program), concurrent enrollment in NURSING 316

## Repeatable for Credit: No

Last Taught: Fall 2020

## 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. Students will learn about factors that impact health of individuals and families. Active learning is emphasized as students apply the nursing process to concepts such as health determinants, health education, selfmanagement, and innate psychological needs related to well-being. Enroll Info: None

Requisites: Declared in Nursing or Nursing (Accelerated Program), NURSING 313 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 315 - PROFESSIONALISM IN NURSING PRACTICE

1-2 credits.
Focuses on professional nursing attributes and interaction essential to professional competence. Students study concepts that allow them 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. Enroll Info: None
Requisites: Declared in Nursing or Nursing (Accelerated Program)
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 316 - FOUNDATIONS OF NURSING PRACTICE: EXPERIENTIAL LEARNING <br> 4-5 credits.

Introduces psychomotor and assessment skills necessary to provide person-centered, evidence-based nursing care. Students will experience opportunities to promote wellness and respond to health problems by participating in direct client care in community and acute-care settings. Students will develop confidence with the application of skills and clinical judgment in a simulation lab and through concept-based learning experiences in care settings. Enroll Info: Declared in the Nursing program and NURSING 313 or concurrent enrollment
Requisites: Declared in Nursing or Nursing (Accelerated Program), NURSING 313 or concurrent enrollment
Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: No Last Taught: Fall 2020

## NURSING 317 - PHARMACOLOGY ESSENTIALS FOR NURSING PRACTICE <br> 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. Enroll Info: None Requisites: Declared in Nursing (Accelerated or Traditional Program)
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Nursing (Accelerated Program) and NURSING 317 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Summer 2020

## NURSING 319 - NURSING CARE IN THE INPATIENT SETTING

4 credits.
Clinical practice in the inpatient setting based on application of clinical decision making in the nursing care of persons with selected physiological and psychosocial problems resulting from pathophysiological processes and the illness experience. Enroll Info: Nurs 212, Nurs 219 or cons inst, Nurs 312 or con reg
Requisites: Admitted to undergraduate Nursing program
Course Designation: Gen Ed - Communication Part B
Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2017

## NURSING 322 - COMMUNITY HEALTH NURSING

3 credits.
Introduction to community health nursing roles focusing on aggregates as targets of public health services. Content includes epidemiology, structure of public health services, levels of prevention, and aggregate assessment. Enroll Info: Chld Fam 362 or 363 or equiv, Nurs 105, Nurs 212, or cons inst
Requisites: Admitted to undergraduate Nursing program
Repeatable for Credit: No
Last Taught: Spring 2018
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. Students gain a fundamental understanding of allostasis, oxygenation and hemostasis, and protection and movement. Students gain knowledge of these concepts through exemplars that illustrate common health processes and/or alterations. The nursing process will frame learning activities that foster understanding of the nursing role in providing care to individuals and families experiencing related health and illness concerns. Enroll Info: None
Requisites: NURSING 313
Repeatable for Credit: No
Last Taught: Fall 2020
NURSING 324 - MEETING THE PSYCHOSOCIAL HEALTH NEEDS OF INDIVIDUALS, FAMILIES, AND COMMUNITIES
3 credits.
Builds on students' previous knowledge to prepare them to meet the psychosocial health needs of individuals, families, and communities across the lifespan. Students will explore psychosocial concepts of stress, coping, mood, cognition, and behavior across the healthillness 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. Students will acquire the knowledge, attitudes, and skills needed to collaborate in the treatment and care of client psychosocial health needs. Enroll Info: None
Requisites: NURSING 314
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Students gain an understanding of concepts of leadership, ethics, and advocacy. Students broaden their understanding of nursing's role in the health care delivery system regarding quality improvement, care coordination, and palliation. Enroll Info: None
Requisites: NURSING 315
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 326 - HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS AND FAMILIES: EXPERIENTIAL LEARNING I <br> 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, building on previous and concurrent coursework. Enroll Info: None
Requisites: NURSING 313, 314, 315, 316 and 317
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Fall 2020

## 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, building on previous and concurrent coursework. Enroll Info: None
Requisites: NURSING 326
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 332 - ESSENTIALS OF FAMILY-CENTERED PERINATAL AND PEDIATRIC NURSING <br> 3 credits.

Introduces principles of family-centered nursing care of women during the perinatal period and of children from infancy through adolescence. Examines nursing strategies for health promotion, illness prevention, and coping with stressors frequently encountered during childbearing, illness, injury, hospitalization. Enroll Info: ChId Fam 362 or 363 or equiv; and NURSING 212; NURSING 219 may be taken concurrently; or cons inst Requisites: Admitted to undergraduate Nursing program
Repeatable for Credit: No
Last Taught: Spring 2017
NURSING 400 - STUDY ABROAD IN NURSING
1-6 credits.

A course carried within a UW-Madison study abroad program, offered in conjunction with International Academic Programs, that has no equivalency on the UW-Madison campus and/or within the School of Nursing. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, for 2 number of completions
NURSING 401 - LEGAL AND SOCIAL FORCES IN NURSING
3 credits.
Legal, social, and ethical forces affecting the education of nurses and the practice of nursing. Enroll Info: Nurs 219
Requisites: Admitted to undergraduate Nursing program
Repeatable for Credit: No
Last Taught: Spring 2018

## NURSING 415 - ORGANIZATIONAL INFLUENCES ON INTERDISCIPLINARY PRACTICE

3 credits.
Analysis of major organizational factors affecting the practice of clinicians in health care delivery organizations. Enroll Info: Nurs/SA Phm/ Soc Wk/Ther Sci 105; Nurs 319 for Nursing majors; or cons inst Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2018

## NURSING 419 - CLINICAL III: COMMUNITY HEALTH NURSING PRACTICUM <br> 4 credits.

This practicum, located in community health nursing agencies, will provide students opportunities for practice directed toward preservation and promotion of health and prevention of disease, illness and injury in populations represented by the aged, parents, children and youth. Enroll Info: Nurs 319, 322, 332, 433 or cons inst. Nurs 322 /or 332, 433 may be taken concurrently
Requisites: None
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2018
NURSING 422 - ADVANCED CONCEPTS IN NURSING PRACTICE 3 credits.

Content is presented to develop skill in the application of concepts and to develop clinical knowledge for nursing practice. Pattern recognition is used to analyze practice concepts within an illness-wellness trajectory, across settings and with diverse populations. Enroll Info: Nurs 419 or con reg or cons inst
Requisites: Declared in Nursing program or Registered Nurse program Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info: ChldFam 362 or 363 or equiv; and NURSING 212; NURSING 219 may be taken concurrently; or cons inst Requisites: Declared in Nursing program, Registered Nurse program, or Nursing Collaborative program
Repeatable for Credit: No
Last Taught: Fall 2017

## NURSING 434 - HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS, FAMILIES, AND COMMUNITIES <br> 4-5 credits.

Builds on students understanding of health and illness concepts by focusing on individuals, families, and communities recognizing their unique attributes. The following core nursing concepts are integrated in the course including: 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. Enroll Info: None Requisites: Declared in Nursing or Nursing (Accelerated Program), NURSING 323 or concurrent enrollment, NURSING 326 or concurrent enrollment, and NURSING 327 or concurrent enrollment
Course Designation: Gen Ed - Communication Part B
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 435 - EVIDENCE-BASED PRACTICE

1 credit.
Designed to develop students' skills in using evidence to improve nursing practice. Students learn strategies to evaluate the quality of evidence and effectively integrate evidence into nursing practice. Provides students with knowledge in how practice guidelines are developed, interpreted, and implemented in complex care settings. Students understand the significance of engaging partners in evidence-based practice and identify processes to partner with others. Concepts from this course are integrated with concurrent courses. Enroll Info: None
Requisites: Declared in Nursing, NURSING 315 and 325
Repeatable for Credit: No
Last Taught: Fall 2020
NURSING 436 - HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS, FAMILIES, AND COMMUNITIES: EXPERIENTIAL LEARNING 2-4 credits.

Students spend concentrated time in two settings focusing on care to individuals across the lifespan, families, and communities. The conceptbased learning activities are aligned with those taught in the companion didactic courses and build on previous learning and experiences. Students provide direct care from an evidenced-based perspective, at an increasingly independent level. The student learning activities are guided by nursing preceptors in practice settings and by School of Nursing faculty in simulation and seminar settings. Enroll Info: None
Requisites: NURSING 323, 324, 327 and (NURSING 325 and PATH 404) or (NURSING 434)
Repeatable for Credit: Yes, for 2 number of completions Last Taught: Fall 2020

## NURSING 437 - SOCIAL JUSTICE IN LOCAL AND GLOBAL SETTINGS

 2-3 credits.Students 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. Students expand their 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. This course provides a facilitated forum for students to critically reflect on their socially constructed identities and the impact these identities have on health care systems. This course is also designed to develop student perspective related to global health and nurses as global health actors invested in improving health of the global population as a whole. Enroll Info: None
Requisites: Declared in Nursing or Nursing (Accelerated Program) and NURSING 323
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: NURSING 434, 435, 436, and 437
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 443 - ADVANCED CONCEPTS IN COMPLEX NURSING PRACTICE <br> 5 credits.

Students learn about complex health or health alterations and their management in regard to sexuality, reproduction, protection and movement, cognitive function, and maladaptive behavior. The course 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. Enroll Info: None
Requisites: (NURSING 434, 435, 436, and 437) or (NURSING 436, 437 or concurrent enrollment, 446 or concurrent enrollment, 447 or concurrent enrollment, and NURSING 448 or concurrent enrollment)
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 444 - HEALTH SYSTEMS, POLICY, ECONOMICS, AND RESEARCH <br> 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. Students expand their understanding of scholarship and evidence-based practice by delving into the process of nursing research. Enroll Info: None
Requisites: NURSING 434, 435, 436, and 437
Repeatable for Credit: No
Last Taught: Spring 2020

## 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, students advance in their transition to becoming a professional nurse. Students are mentored through cofacilitation by faculty, academic staff, and practice professionals. Enroll Info: None
Requisites: NURSING 434, 435, 436, and 437
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Students are mentored by clinical nursing preceptors in the clinical setting and by School of Nursing faculty in simulation and seminar settings. Enroll Info: None

Requisites: NURSING 436
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Spring 2020

## 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 evidencebased practice and identify processes to partner with others in order to have an impact on client care outcomes. Enroll Info: None
Requisites: Declared in Nursing (Accelerated Program), NURSING 314, $323,324,326,327$, and 434
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 448 - LEADERSHIP IN THE PROFESSION OF NURSING

 2 credits.Learning is centered on advancing knowledge of professional attributes necessary in healthcare settings. Students expand their understanding of core concepts related to ethics, advocacy, safe therapeutic care technology, and health informatics at a systems-level to influence care and outcomes. Students broaden their understanding of nursing's role in the healthcare delivery system regarding quality improvement, emergency preparedness, care coordination, and palliation. Enroll Info: None
Requisites: Declared in Nursing (Accelerated Program), NURSING 314, $323,324,326,327$, and 434
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 449 - NURSING CARE OF PERSONS AND FAMILIES WITH COMPLEX HEALTH CARE NEEDS <br> 4 credits.

The overall goal is the provision of comprehensive nursing care to a specific patient population. Scientific, theoretical, and experiential knowledge will form the basis for student nursing practice. Enroll Info: Nurs 419
Requisites: Admitted to undergraduate Nursing program
Course Designation: Workplace - Workplace Experience Course
Repeatable for Credit: No
Last Taught: Spring 2018

## NURSING 470 - SCHOOL NURSING IN THE CONTEXT OF COMMUNITY HEALTH PRACTICE <br> 2-3 credits

Theoretical foundation for community health nursing (CHN) applied to school nurse settings. Students 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. ADN nurses who have not had a community health nursing course enroll for 3 credits. Enroll Info: Nursing major -junior standing or NCP classification; For students in the nursing major prior or concurrent community health course; or consent of instructor
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 472 - PRACTICUM IN SCHOOL NURSING

6 credits.
Direct work with the school nurse and school staff in planning and providing health services to school age youth and school personnel. Enroll Info: Nurs 470, Jr st or NRN classification or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2012

## NURSING 490 - MENTAL HEALTH NURSING ACROSS THE CARE CONTINUUM

3 credits.
This course is 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. Enroll Info: None
Requisites: Only students who have declared the BSN@Home program
Repeatable for Credit: Yes, unlimited number of completions

## NURSING 510 - CULTURALLY CONGRUENT PRACTICE

3 credits.
Seminar assists students in building self-awareness, increasing knowledge, and advancing clinical skills needed to provide culturally congruent, person-centered care to patients with diverse backgrounds. Enroll Info: None
Requisites: None
Course Designation: Ethnic St - Counts toward Ethnic Studies requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Students will work across disciplines to learn how different areas of society can become dementia friendly and how to integrate relevant approaches in their future careers. Students will participate in a servicelearning opportunity where they will work with local dementia-friendly community groups to strengthen supports for people with dementia and their caregivers. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Declared in Kinesiology and KINES 314
Repeatable for Credit: No
Last Taught: Spring 2019

## NURSING/POP HLTH 525 - NURSING LEADERSHIP FOR GLOBAL HEALTH <br> 2-3 credits

This course is designed to prepare undergraduate and graduate nursing students for leadership in global health (GH) by examining their GH goals in a course 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. Students' learning activity will be tailored to their program level (undergraduate/ graduate), their interests and the number of credits they register for. Enroll Info: Junior standing and declared in a Nursing program
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 eveluation of informatics solutions. Ethical, legal and social issues related to informatics in patient care. Enroll Info: Jr St or cons inst
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2013

## NURSING 590 - CONTEMPORARY PRACTICES IN NURSING

 1-4 creditsHealth problems and their nursing management, e.g., critical care nursing, health promotion and prevention of disease, nursing of developmental disabilities. Enroll Info: None
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2020

## NURSING 601 - ADVANCED HEALTH ASSESSMENT

3 credits.
Focuses on developing advanced practice competencies in health assessment as relevant to students' selected specialty and practice setting. Students will be 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 provide structure for the course. Additionally, successful students will 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. Enroll Info: None Requisites: Declared in Nursing Practice, DNP and NURSING 704 Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING/PHM PRAC 605 - PHARMACOTHERAPEUTICS FOR ADVANCED PRACTICE NURSES <br> 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. Enroll Info: None
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 2020
NURSING 657 - CLINICAL PSYCHOPHARMACOLOGY
3 credits.

This course 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, the course focuses on pharmacokinetics, pharmacodynamics, side-effects, drug interactions, therapeutic monitoring and variations in special populations. Finally, this course will review prescriptive authority, the potential impact of the current mental health care service system and ethical decision making for health care professionals. Enroll Info: None
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 2020

## NURSING 660 - RELAXATION STRATEGIES: TOOLS FOR PRACTICE

 1 credit.Addresses the physiology of strees and relaxation, various strategies for facilitating relaxation and evidence for the same; provides opportunities to experience selected relaxation strategies. Enroll Info: Preference given to those with Jr st and above
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2013

## NURSING/PHM PRAC 674 - SEMINARS IN INTERPROFESSIONAL MENTAL HEALTH CARE <br> 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. Enroll Info: None
Requisites: PHM PRAC 555
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 679 - NURSING HONORS RESEARCH SEMINAR 2 credits.

Provides students with the opportunity to learn more about the generation of nursing knowledge and about School of Nursing faculty members' research projects. It introduces students 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. Enroll Info: None
Requisites: Declared in the Nursing Honors program
Repeatable for Credit: No
Last Taught: Spring 2020
NURSING 680 - HONORS SEMINAR
1 credit.
Provides honors students with an opportunity to learn about faculty research interests. Enroll Info: Admission to the School of Nursing honors progm
Requisites: Declared in 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. One credit is required. Enroll Info: Honors admission; cons inst
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 682 - SENIOR HONORS THESIS

1-2 credits
The senior honors thesis is a directed experience with selected aspects of the research process. One credit is required. Enroll Info: Honors admission, cons inst, NURSING 681
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Jr st cons inst 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
NURSING 699 - DIRECTED STUDY IN NURSING
1-4 credits.
Enroll Info: Jr st cons inst
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 2020

## NURSING 702 - HEALTH PROMOTION AND DISEASE PREVENTION IN DIVERSE COMMUNITIES <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. The course 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 policymaking, including economics, innovation, social, ethical, and political factors. The role and responsibility of nurse leaders and the impact of health policy on nursing practice at the individual, community, and population level is examined. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Nursing graduate program or Doctor of Nursing program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: SOC/POP HLTH 797 and STAT/B M I 542
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: Grad st in nursing or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 707 - LEADERSHIP FOR ADVANCED PRACTICE NURSES

 1 credit.Develops professional leadership skills and practices within nursing health care systems with emphasis on interprofessional collaboration. This course is specifically designed for post masters advanced practice nurses. Enroll Info: Master Degree (Nursing)
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## NURSING 708 - ETHICS FOR ADVANCED PRACTICE IN HEALTH CARE

 2 credits.The emphasis of the course is on 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. Enroll Info: Admission to the DNP program or cons inst (e.g., for other graduate students in health sciences) Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## NURSING 709 - LEADERSHIP FOUNDATIONS: THE DISCIPLINE OF NURSING <br> 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. This seminar provides nurses with foundational knowledge, skills, and attitudes needed for nursing leadership and population health. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 711 - BUSINESS CONCEPTS IN HEALTHCARE

 3 creditsDesigned 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 712 - HEALTH SYSTEMS LEADERSHIP AND INNOVATION PRACTICUM I <br> 3 credits

An opportunity to explore and analyze healthcare systems including practical skills in leading teams. Based on the past nursing management experience and future role goals, this 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 with an expectation of 250 practicum hours. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 713 - HEALTH SYSTEMS LEADERSHIP AND INNOVATION PRACTICUM II

3 credits.

Designed to 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 is on the student's 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/communitysetting with an expectation of 250 practicum hours. Students are expected at a minimum to co-lead an interdisciplinary improvement team and are encouraged to apply key learnings from leadership, business, informatics, innovation and human factors courses to the practicum. Enroll Info: None
Requisites: NURSING 712
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 714 - ADVANCED HEALTH SYSTEMS LEADERSHIP AND NNOVATION

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 719 - INDEPENDENT FIELD STUDY IN CLINICAL NURSING

 1-6 creditsConcentrated study and field work in a selected area of clinical nursing.
Enroll Info: None
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 course focused on the application of foundational skills and perspectives of advanced population health nursing practice. Provides an opportunity for students 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. Enroll Info: None
Requisites: Graduate/professional standing, or NURSING 702 or concurrent enrollment
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: NURSING 720, 723, and 724 or concurrent enrollment Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 722 - ADVANCED PRACTICE NURSING THEORY: ADULTS AND OLDER ADULTS <br> 3 credits.

This course will 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
NURSING 723 - POPULATION HEALTH THEORY AND METHODS SEMINAR I: CONTEMPORARY ISSUES \& POPULATION HEALTH ETHICS 2 credits.

Introduces students 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. Enroll Info: None
Requisites: NURSING 702 or concurrent enrollment
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## NURSING 724 - POPULATION HEALTH THEORY AND METHODS SEMINAR II: INTERDISCIPLINARY PRACTICE, COLLECTIVE IMPACT, AND

 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 students to consider novel partnerships, shared decisionmaking, and innovative, multifaceted approaches to practice. Enroll Info:

## None

Requisites: NURSING 720, 723, and concurrent enrollment in NURSING 721
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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 Doctor of Nursing Practiceprepared nurses can bring to solution-seeking and interdisciplinary efforts to promote or safeguard population health. Enroll Info: None 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 students' knowledge for clinical decision making. Health promotion, illness prevention and common health conditions are emphasized. Content tailored to APN role and population focus. Enroll Info: N601, N605, N811, concurrent enrollment in N728, or consent of 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: Fall 2020

NURSING 727 - FOUNDATIONS FOR APN CLINICAL PRACTICE II 3 credits.

Designed to continue to advance students' 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. Content tailored to APN role and population focus. Enroll Info: N726, N728, concurrent enrollment in N729, or consent of 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 2020

## 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. Practicum tailored to APN role and population focus. Enroll Info: N728, concurrent enrollment in N727, or consent of 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: Fall 2020

## 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. Practicum tailored to APN role and population focus. Enroll Info: N728, concurrent enrollment in N727, or consent of 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 2020

## NURSING 730 - CRITICAL SOCIAL THEORIES IN POPULATION HEALTH

 2 creditsExamines 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. Enroll Info: None
Requisites: NURSING 723 or concurrent enrollment
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## NURSING 740 - ISSUES IN NURSING CARE OF CHILDREN WITH CHRONIC ILLNESS IN THE SCHOOLS <br> 1 credit.

Seminar provides an opportunity for students, faculty, and professionals in the community to discuss emerging issues in the field of school nursing care of children with chronic health conditions. Seminar introduces students 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.
Enroll Info: Graduate standing, certificate student or consent of instructor 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.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING/PHM PRAC/SOC WORK 746 - INTERDISCIPLINARY CARE OF CHILDREN WITH SPECIAL HEALTH CARE NEEDS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 747 - PRACTICUM IN A SELECTED FUNCTIONAL AREA

 $0-8$ credits.Guided practicum in teaching consultation, or clinical specialist roles; students assigned to a teaching department, a nursing unit, or a cooperating community health agency according to interest. Enroll Info: None
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 2012

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Summer 2020
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 lifethreatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures. Enroll Info: Graduate or Professional standing or acceptance in Capstone Certificate in Consumer Health Advocacy
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

## NURSING/LAW/MED SC-M 769 - CONSUMER ISSUES IN HEALTH CARE

 1-3 credits.Explores consumer issues in health care delivery in interdisciplinary discussion-based format. Covers current delivery system, expenditures/ finance, managed care/insurance, barriers to access, reform, and other select topics. Ideal for future healthcare providers and others interested in patients' experiences. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## NURSING 772 - LEADERSHIP AND ORGANIZATIONAL DECISIONMAKING IN HEALTH CARE <br> 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. The course 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: Grad st in nursing, grad research crse or cons inst Requisites: Declared in Nursing graduate program or Doctor of Nursing program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
NURSING 786 - FOUNDATIONS OF TEACHING AND LEARNING IN NURSING
3 credits.
The focus of this course is the planning, implementing, and evaluation of teaching and learning strategies for nursing education within diverse settings and student populations. Enroll Info: NURSING 785
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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). Seminar component included for discussion of instructional experiences and issues. Enroll Info: NURSING 785 and 786 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 788 - SPECIAL TOPICS IN EDUCATION IN NURSING

 1-3 credits.Examination of current topics and issues in nursing education. Enroll Info: Grad St in Nursing or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

## NURSING 798 - MASTER'S RESEARCH PRACTICUM

3 credits.
The goal of the research practicum is to promote the student's learning of the research process in nursing through direct experience. Students work closely with faculty to determine the nature, scope and design of the research experience. Enroll Info: 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.
Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## NURSING 803 - ADVANCED QUANTITATIVE DESIGN AND METHODS

 3 creditsOne of two research courses in the PhD program in nursing, this course focuses on the conduct of research primarily from empirical, analytical traditions. In the course, students will: * 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. Enroll Info: PhD student in nursing and course in graduate statistics or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
NURSING 804 - ADVANCED QUALITATIVE DESIGN AND METHODS
3 credits.
One of two research courses in the graduate PhD program in nursing, this course 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. The class format also offers students opportunities to engage in research procedures associated with various qualitative traditions. Enroll Info: NURSING 803 or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: An intro crse in stats, Grad st or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## NURSING 806 - EVALUATION AND APPLICATION OF EVIDENCE-BASED

 PRACTICE3 credits.
This course evaluates collective evidence and applies it, as appropriate, as a basis for improving nursing practice, health care, and healthcare outcomes. Enroll Info: Grad st in nursing or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Students should complete a graduate-level research course prior to enrolling.
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Summer 2020

## NURSING 811 - ADVANCED PATHOPHYSIOLOGY

3 credits.
In-depth study of selected physiological and pathophysiological concepts with application to advanced clinical practice across the lifespan. Enroll

## Info: None

Requisites: Declared in Nursing graduate program or Doctor of Nursing program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 816 - PROSEMINAR IN NURSING RESEARCH

1 credit.
This seminar focuses 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. Two semesters are required; one in the first year of doctoral study and one as the student is nearing completion of course work. Enroll Info: None
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

## NURSING 818 - PATIENT-CENTERED RESEARCH

3 credits.
This course 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. Enroll Info: NURSING 815 a grad level research methods course or consent of instructor Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## NURSING 819 - CLINICAL FIELD PRACTICUM - RESEARCH IN HEALTH CARE SETTINGS <br> 3 credits.

This course provides a field experience in preparation for conducting clinical research in the health care setting that corresponds to the student's chosen health problem, phenomenon, or population of interest. Students will engage as participants and observers in the care setting to deepen their knowledge of the selected health problem and to examine the application of theory and research in the care setting. Students will negotiate a field experience with a selected agency or institution and participate in biweekly seminars. Enroll Info: Graduate student standing. Completion of at least one graduate level theory course in the population or phenomenon of interest. Completion of at least one graduate level research 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: Fall 2020
NURSING 826 - FOUNDATIONS FOR APN CLINICAL PRACTICE III 3 credits.

Designed to continue to advance students' knowledge for clinical decision-making. Coordination of complex care across systems and settings will be emphasized. Content tailored to APN role and population focus. Enroll Info: N727, N729, concurrent enrollment in N828, or consent of 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: Fall 2020

## NURSING 828 - CLINICAL LEADERSHIP III

1-4 credits
The focus of the Doctorate of Nursing Practice supervised clinical practice course is to enhance clinical leadership skills within the role of an Advanced Practice Nurse. Students collaborate with a faculty course professor and clinical preceptor to meet individualized learning objectives. Enroll Info: Clinical II or equivalent
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

## NURSING 829 - CLINICAL LEADERSHIP IV

1-4 credits.

The focus of this Doctor of Nursing Practice supervised clinical practice course is to continue to enhance clinical leadership skills within the role of an Advanced Practice Nurse. Students collaborate with a faculty course professor and clinical preceptor to meet individualized learning objectives. Enroll Info: NURSING 828
Requisites: 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

## NURSING 830 - LEADERSHIP, ROLE DEVELOPMENT, AND RESOURCE STEWARDSHIP PRACTICUM <br> 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. Enroll Info: None
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 the student's targeted focus area, phenomenon, or population of interest. Students will negotiate a policy experience with a selected agency or institution and actively participate in class seminars. Students will analyze relevant policies to their population of interest and actively influence the design, development, and implementation of a policy. Students will examine strategies to accelerate policy adoption and implementation. Enroll Info: None
Requisites: Declared in Nursing Practice, DNP; or Nursing, PH.D
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## NURSING/ED PSYCH/HDFS/SOC WORK 880 - PREVENTION SCIENCE

 3 creditsThis 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## NURSING 906 - SCHOLARLY PROJECT

1-4 credits

Independent scholarly project involves a systematic, evidence-based approach to enhance health-related outcomes. Project completed over two to three semesters. Enroll Info: Grad statistics crse, NURSING 706 and NURSING 806
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 2020

NURSING 990 - THESIS RESEARCH
1-9 credits

Enroll Info: Grad st thesis comm approval
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

## NURSING 999 - ADVANCED INDEPENDENT STUDY

1-9 credits

Enroll Info: None
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

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Nutritional Sciences - Pre-Dietetics or Nutritional Sciences - Dietetics
Repeatable for Credit: No
Last Taught: Fall 2020

## NUTR SCI/AGRONOMY/ENTOM 203 - INTRODUCTION TO GLOBAL HEALTH <br> 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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## NUTR SCI 289 - HONORS INDEPENDENT STUDY

1-2 credits
Research work under direct guidance of a Nutritional Sciences faculty or instructional academic staff member. Enroll Info: 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. Enroll Info: 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 2020
NUTR SCI/AN SCI/DY SCI 311 - COMPARATIVE ANIMAL NUTRITION 3 credits.

Nutrients and their source, assimilation, function and requirement. Enroll Info: None
Requisites: Must have completed BMOLCHEM 314 Intro to Human Biochemistry or CHEM 341 Intro Organic Chemistry or CHEM 343 Intro Organic Chemistry or BIOCHEM 501 Intro Biochemistry
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 2020
NUTR SCI 332 - HUMAN NUTRITIONAL NEEDS
3 credits.
Biochemical and physiological basis of the nutritional requirements of humans. Enroll Info: None
Requisites: CHEM 103 and ZOOLOGY/BIOLOGY/BOTANY 151,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: Fall 2020
NUTR SCI/A A E/AGRONOMY/INTER-AG 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## NUTR SCI 375 - SPECIAL TOPICS

1-4 credits
Special topics on contemporary issues relevant to undergraduate students studying health and nutrition. Enroll Info: None
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. Enroll Info: None
Requisites: NUTR SCI 132 or 332
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 atrisk 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. Enroll Info: None

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

## NUTR SCI 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION <br> 1-8 credits

Internship under guidance of a Nutritional Sciences faculty or instructional academic staff member and internship site supervisor. Enroll Info: 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: Spring 2020

## 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. Enroll Info: None Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
NUTR SCI/INTER-AG 421 - GLOBAL HEALTH FIELD EXPERIENCE
1-4 credits.

Addresses a broad range of health topics including nutrition, primary health care, water and sanitation, climate change, sustainable agriculture, and economic development. These field experiences take place in sites around the world including locations in Africa, Asia, Latin America, Europe, and the United Sates. Engaged learning will include participation in applied public health activities and service learning projects with communities and partner organizations. Students will gain knowledge about health and disease and explore interdisciplinary approaches to health. Field experiences are designed to meet the requirement for the Undergraduate Certificate in Global Health. Enroll Info: Students who are not planning to complete the Certificate in Global Health may enroll as space permits.
Requisites: Consent of instructor
Course Designation: Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Junior standing, grade of C in ANAT\&PHY 335 and grad 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: Summer 2020

## 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 nutritionoriented research. Enroll Info: None

Requisites: NUTR SCI 431 and 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. Enroll Info: None
Requisites: NUTR SCI 431 and NUTR SCI/BIOCHEM 510 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020

## NUTR SCI/BIOCHEM 510 - NUTRITIONAL BIOCHEMISTRY AND METABOLISM <br> 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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
Requisites: ANAT\&PHY 335 or PHYSIOL 335
Repeatable for Credit: No
Last Taught: Fall 2020

## NUTR SCI 540 - COMMUNITY NUTRITION PROGRAMS AND POLICY ISSUES <br> 1 credit.

Students will increase their understanding of community-based nutrition needs, intervention programs and policy issues in the U.S. Written assignments will demonstrate students' positions on related issues Enroll Info: None
Requisites: NUTR SCI 431 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 2020

## NUTR SCI 550 - NUTRITION AND COUNSELING FOR ATHLETIC PERFORMANCE <br> 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. Enroll Info: None
Requisites: NUTRI SCI 332
Repeatable for Credit: No

## NUTR SCI 600 - INTRODUCTORY SEMINAR IN NUTRITION

1 credit.

Presentation of reports from current journals of nutritional sciences.
Enroll Info: None
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: STAT 301 and NUTR SCI 332, or graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing, NUTR SCI/BIOCHEM 510 and ANAT\&PHY 335 or concurrent enrollment (or PHYSIOL 335 prior to Fall 2018)
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: NUTRI SCI 619 or concurrent registration, and ANAT\&PHY 335 or equivalent
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing, STATS 301 and (NUTR SCI/ BIOCHEM 510 or concurrent enrollment)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None

Requisites: Graduate/professional standing, NUTR SCI/BIOCHEM 510 and ANAT\&PHY 335 or concurrent enrollment (or PHYSIOL 335 prior to Fall 2018)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: NUTR SCI 631
Repeatable for Credit: No
Last Taught: Spring 2020

## NUTR SCI 635 - ADVANCED CLINICAL NUTRITION

1 credit.
Clinical nutrition and rationale for medical nutrition therapy in relation to the pathophysiology of specific disease states. Lectures, case studies and discussion of current research. Enroll Info: None
Requisites: NUTR SCI 431, 631 or concurrent enrollment, and
(BIOCHEM 501, BMOLCHEM 314, or BMOLCHEM 503)
Repeatable for Credit: No
Last Taught: Fall 2011
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. Enroll Info: None
Requisites: Declared in a Nutritional Sciences undergraduate program and previous or concurrent enrollment in NUTR SCI 631
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in a Nutritional Sciences undergraduate programs and concurrent enrollment in NUTR SCI 632

## Repeatable for Credit: No

## 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. Enroll Info: None
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 2020

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. Enroll Info: None Requisites: Declared in Clinical Nutrition masters degree program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

NUTR SCI 651 - ADVANCED CLINICAL NUTRITION - PEDIATRICS 3 credits.

Pediatric nutritional requirements with emphasis on issues related to evidence-based medical nutrition therapy. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Capstone Certificate in Clinical Nutrition - Dietetic Internship
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Capstone Certificate in Clinical Nutrition - Dietetic Internship
Repeatable for Credit: No
Last Taught: Spring 2020

## NUTR SCI/PHM PRAC 672 - HERBALS, HOMEOPATHY, AND DIETARY SUPPLEMENTS

2-3 credits.
Covers regulations and clinical science regarding the use of herbals, homeopathic remedies, and dietary supplements, focusing on peerreviewed studies and integration with allopathic drugs; includes discussion of marketing issues. Enroll Info: None
Requisites: (PHM SCI 432 or BIOCHEM 501 or BMOLCHEM 314) and PHYSIOL 335
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: No
Last Taught: Spring 2020

## NUTR SCI 699 - SPECIAL PROBLEMS

1-3 credits.
Directed study under direct guidance of a Nutritional Science faculty member or instructional academic staff member. Enroll Info: None 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 2020

## 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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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). Enroll Info: None Requisites: Declared in Clinical Nutrition masters degree program Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Clinical Nutrition masters degree program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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. Enroll Info: None
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

## NUTR SCI 881 - SEMINAR-TOPICS IN HUMAN AND CLINICAL NUTRITION <br> 1 credit.

Varied topics in clinical and human nutrition. Enroll Info: None Requisites: NUTRI SCI 600
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

## NUTR SCI/BIOCHEM 901 - SEMINAR-NUTRITION AND METABOLISM (ADVANCED) <br> 1 credit.

Presentation of original research results; discussion of recent articles in animal metabolism and nutrition. Enroll Info: None
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
NUTR SCI 931 - SEMINAR-NUTRITION
1 credit.
Seminar features expert presentations of current research and issuebased applications that represent the breadth of nutritional sciences; topics investigate problems "from molecules to communities". Enroll Info: None
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
NUTR SCI 991 - RESEARCH NUTRITION
1-12 credits.
Independent research with assigned instructor. Research projects determined by agreement between instructor and student. Enroll Info:

## None

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
NUTR SCI 993 - INDEPENDENT STUDY IN NUTRITION
1-12 credits.
Independent research with assigned instructor. Research projects determined by agreement between instructor and student. Enroll Info:

## None

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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OBS\&GYN 712 - CRITICAL THINKING IN REPRODUCTIVE ENDOCRINE PHYSIOLOGY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None Requisites: SOC/POP HLTH 797
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
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

## OBS\&GYN 919 - INDIVIDUALIZED OBSTETRICS \& GYNECOLOGY ELECTIVE <br> 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 practitioneers. Individualized to meet each location's capacity and student preference. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
OBS\&GYN/AN SCI/ZOOLOGY 954 - SEMINAR IN ENDOCRINOLOGYREPRODUCTIVE 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. Enroll Info: None 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

## OBS\&GYN 955 - RESPONSIBLE CONDUCT OF RESEARCH FOR BIOMEDICAL GRADUATE STUDENTS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## OBS\&GYN 956 - ADVANCED RESPONSIBLE CONDUCT OF RESEARCH FOR BIOMEDICAL STUDENTS <br> 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. Enroll Info: None
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 2020
OBS\&GYN 990 - RESEARCH
1-10 credits.
Research supervised by individual faculty members. Enroll Info: None 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

# 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## OCC THER/L I S/NURSING 517 - DIGITAL HEALTH: INFORMATION AND TECHNOLOGIES SUPPORTING CONSUMERS AND PATIENTS <br> 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. Enroll Info: None
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

## OCC THER 610 - PROFESSIONAL SKILLS I: PROFESSIONAL PRACTICE IN OCCUPATIONAL THERAPY <br> 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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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. Offered during the final semester on campus, also addresses issues related to career development in occupational therapy. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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 <br> 4 credits.

Current research, theory, and core concepts relating to the therapeutic use of occupations to facillitate participation of children with disabilities and their families in everyday routines within their communities. Enroll Info: Current enrl in MS in occ ther or cons inst

## Requisites: None

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 <br> 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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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 <br> 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. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

OCC THER 625 - LEVEL-I FIELDWORK: INFANTS AND CHILDREN 1 credit.

Supervised clinical experience involving occupational therapy practice with children; companion course to Ther Sci 622. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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; companion course to Ther Sci 623. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
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; companion course to Ther Sci 624. Enroll Info: Current enrl in MS in occ ther or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: ANATOMY 622; current enrl in MS in occ ther prgm or cons inst
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework

## requirement

Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: OCC THER 651
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 662 - LEVEL II FIELDWORK A

6 credits.
The first of two twelve-week, full-time supervised experiences of applied occupational therapy practice. Student conducts evaluations and provides treatment under supervision for an assigned caseload in an approved practice setting. The student begins Level II fieldwork after all academic coursework has been successfully completed. Enroll Info: Ther Sci 648, 649 cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## OCC THER 664 - LEVEL II FIELDWORK B

6 credits.

The second of two twelve-week, full-time supervised experiences of applied occupational therapy practice. Student conducts evaluations and provides treatment under supervision for an assigned caseload in an approved practice setting. The student begins Level Il fieldwork after all academic coursework has been successfully completed. Enroll Info: Ther Sci 640, 641 cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. The goal is to encourage the development of critical reading and writing skills. Enroll Info: Current enrl in MS in occ ther prgm or cons inst
Requisites: None
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. The course provides an overview of research design with particular relevance to understanding human occupation and the practice of occupational therapy. Enroll Info: Current enrl in MS in occ ther prgm or cons inst
Requisites: None
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. Through a series of lectures, discussions, and lab activities students are guided through the development of a research proposal and analysis of data. Enroll Info: Current enrl in MS in occ ther prgm or cons inst

## Requisites: None

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.
Students complete a research project proposed in the previous course. Emphasis is on interpretation and dissemination of findings and contributing to the evidence for practice via development of a final paper and a poster presentation. Enroll Info: Current enrollment in MS in occupational therapy program or consent of instructor
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 711 - PROFESSIONAL AND LEADERSHIP SKILLS 2: EFFECTIVE INTERPROFESSIONAL RELATIONSHIPS <br> 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 Enroll Info: None
Requisites: OCC THER 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

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. Enroll Info: None

## 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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None Requisites: OCC THER 722
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: OCC THER 723
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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 Enroll Info: None
Requisites: OCC THER 724
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 726 - LEVEL 1 FIELDWORK A: ADULT PHYSICAL DISABILITIES <br> 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. Enroll Info: None
Requisites: Concurrent enrollment in OCC THER 723 is required
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 727 - LEVEL 1 FIELDWORK B: COMMUNITY-BASED MENTAL <br> HEALTH <br> 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. Enroll Info: None
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

## OCC THER 728 - LEVEL 1 FIELDWORK C: PEDIATRICS <br> 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. Enroll Info: None
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

## OCC THER 731 - LIVING WELL: WELLNESS PROMOTION FOR GRADUATE STUDENTS <br> 1 credit.

Promote students' wellness as they manage graduate school and its demands. Examines health and well-being related to students' timeuse patterns; balance among daily activities; daily routines and habits; circadian rhythms; meaningful moments; sleep; and social connections.
Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 732 - LIVING WELL: DESIGNING OCCUPATION-BASED WELLNESS PROMOTION <br> 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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 733 - PROMOTING HEALTH AND WELLNESS FOR POPULATIONS <br> 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. Enroll Info: None Requisites: Declared in Occupational Therapy OTD: Entry Level
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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 evidencebased practice sequence leading to the development of a proposal and completion of a scholarly study. Enroll Info: None
Requisites: OCC THER 771
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None

## Requisites: OCC THER 772

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Course will include a reflective analysis of the student's own leadership and management style. Students will apply key principles of effective networking, collaboration and interdisciplinary practice to further develop their own leadership competencies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. The course will emphasize development of leadership skills for shaping, advocating and guiding occupational therapy through a continually evolving practice landscape. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## OCC THER 813 - ADVANCED PRACTICE IN INTERPROFESSIONAL CONTEXTS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2019

## OCC THER 814 - COMMUNICATING OT TO INTERPROFESSIONAL AUDIENCES <br> 3 credits.

Leaders frequently must communicate their ideas and knowledge to a variety of audiences in a compelling manner. 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. The key principles for building effective presentations, whether oral, written, or interactive, will be presented. Includes the review and critique of communication from various media presented by occupational therapy leaders as well as peers enrolled in the program. Apply the principles learned to a specific project for presentation to an interprofessional audience. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: Declared in Occupational Therapy OTD: Entry Level
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
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. Enroll Info: None
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
Multiple sources of evidence in the professional literature will be examined and applied to a specific intervention or topic that is relevant to students' professional development goals and/or capstone project. Appropriate methodologies, analytic tools and procedural reasoning will be leveraged in support of recommendations regarding the application of the intervention or approach in the practice environment. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Students will pursue a practice-relevant question which can be answered using available data. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## OCC THER 873 - ADVANCED OUTCOME MEASUREMENT IN OCCUPATIONAL THERAPY

3 credits.
Occupational therapy practice and research rely on outcome measures to document efficacy and effectiveness of programs and interventions. 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. New measurement "toolboxes" such as the NIH Toolbox developed to standardize assessment and outcome measurement and the Rehab Measures Database will be explored to identify state of the art measurement tools and techniques. Strategies and skills for assessing the psychometric properties and clinical utility of a variety of outcomes measures will be learned. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Declared in Occupational Therapy graduate programs Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## OCC THER 881 - CAPSTONE PROJECT 1

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. Enroll Info: None
Requisites: OCC THER 880
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
OCC THER 882 - CAPSTONE PROJECT II
3 credits.
The culminating course for the degree, representing synthesis of knowledge gained. 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. Enroll Info: None
Requisites: OCC THER 881
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

OCC THER 883 - DOCTORAL EXPERIENTIAL COMPONENT 6 credits.

An advanced placement that provides an opportunity for applied experiences within their concentration area. Enroll Info: None 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 <br> 1-3 credits.

Course content designed specific to student's curriculum plan to enhance knowledge of occupational therapy in global arenas, across service delivery systems and in inter-professional contexts. Enroll Info: None 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 2020

## ONCOLOGY (ONCOLOGY)

ONCOLOGY 401 - INTRODUCTION TO EXPERIMENTAL ONCOLOGY 2 credits.

Biological processes associated with and characteristic of neoplasia. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101, BOTANY/BIOLOGY 130, 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 2020
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. Enroll Info: None
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

## ONCOLOGY/M\&ENVTOX/PHM SCI/PHMCOL-M/POP HLTH 625 TOXICOLOGYI <br> 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. Enroll Info: None
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 2020
ONCOLOGY/PL PATH 640 - GENERAL VIROLOGY-MULTIPLICATION OF VIRUSES
3 credits.
Bacterial and animal viruses, their structure, multiplication, and genetics. Enroll Info: None
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 2020
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. Enroll Info: None
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 2019
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. Enroll Info: None
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: Summer 2020

ONCOLOGY 699 - SPECIAL RESEARCH PROBLEMS
1-3 credits.
Directed study projects as arranged with instructor. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ONCOLOGY 715 - ETHICS IN SCIENCE
1 credit.
A review and discussion of the fundamentals of ethical issues in science. Enroll Info: None
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
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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
ONCOLOGY 901 - SEMINAR
1 credit.
Critical review of selected topics in cancer research. Enroll Info: None
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
ONCOLOGY 990 - RESEARCH
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
OTM 351 - PRINCIPLES AND TECHNIQUES OF QUALITY MANAGEMENT 3 credits.

Introduces students to the terminology, concepts, principles, and techniques for managing and improving quality. Enroll Info: None
Requisites: Sophomore standing and OTM 300
Repeatable for Credit: No
Last Taught: Fall 2020

## OTM 365 - CONTEMPORARY TOPICS

1-3 credits.
An exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Sophomore standing and OTM 300
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## OTM 370 - SUSTAINABLE APPROACHES TO SYSTEM IMPROVEMENT

 3 credits.Organizations employ a variety of improvement approaches to develop sustainable practices. This course examines innovative systemimprovement concepts and methodology that directly address sustainability concerns such as natural capital, emission buildup, and base of the pyramid, while simultaneously strengthening mission-central concerns such as cost, quality, customer, market, revenue, profit, brand, reputation sourcing, and quality of work life. Enroll Info: None Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
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

## OTM/MARKETNG 421 - FUNDAMENTALS OF SUPPLY CHAIN MANAGEMENT <br> 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. Enroll Info: None
Requisites: Sophomore standing and (MARKETNG 300 or OTM 300) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Sophomore standing, MARKETNG 300, and OTM 300; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Sophomore standing and (MARKETNG 300 or OTM 300) or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## OTM/MARKETNG 427 - ENTERPRISE SYSTEMS AND SUPPLY CHAIN MANAGEMENT <br> 3 credits.

Provides an overview of enterprise systems and supply chain business processes. Introduces students to how enterprise systems are used to manage supply chains and make effective business decisions. Students will use SAP enterprise resource planning software throughout the course. Enroll Info: None
Requisites: Sophomore standing, MARKETNG 300, and OTM 300; or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Junior standing and (MARKETNG 300 or OTM 300), or member of Business Exchange program
Repeatable for Credit: No

## OTM 442 - DATABASE MANAGEMENT AND APPLICATIONS

3 credits
Introduces students to the concepts of database analysis, design, implementation, and management. Main topics include conceptual and relational database modeling and design; relational database processing and Structured Query Language (SQL); Microsoft Access. A real-world team project that uses the concepts and technologies taught in the course is an important element. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
OTM 444 - ECONOMICS OF TRANSPORTATION
3 credits.
Influence of transport costs on economic development, industrial location and market penetration; economic characteristics of carriers; pricing policies and practices in transport; interrelationship of public policy issues and decisions by suppliers and users of transportation. Enroll Info: None
Requisites: (ECON 101 or 111) or member of 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: Fall 2013
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. Enroll Info: None Requisites: OTM 300
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None

Requisites: Sophomore standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: OTM 300 and GEN BUS 306
Repeatable for Credit: No

## OTM/I SY E/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. Enroll Info: None

Requisites: (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: Fall 2020

## OTM/I SY E/MATH 633 - QUEUING THEORY AND STOCHASTIC MODELING <br> 3 credits.

Reliability theory; coherent systems and reliability bounds. Markovian queues and Jackson networks. Steady-state behavior of general service time queues. Priority queues. Approximation methods and algorithms for complex queues. Simulation. Dynamic programming; applications to inventory and queueing. Enroll Info: None
Requisites: STAT/I SY E/MATH/OTM 632
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 2010

## 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. Enroll Info: None
Requisites: Sophomore standing and OTM 300
Repeatable for Credit: No
Last Taught: Spring 2020

OTM/I SY E/INFO SYS 671 - E-BUSINESS: TECHNOLOGIES, STRATEGIES AND APPLICATIONS
3 credits.
Overview of core concepts of e-commerce and e-business technologies, strategies and applications. Covers business-to-consumer, business-tobusiness and intra-business models by using real-world examples and cases from various industries. Enroll Info: None
Requisites: Senior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
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. Enroll Info: None
Requisites: Declared in an MBA program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020
OTM/MARKETNG 726 - SEMINAR IN SUPPLY CHAIN MANAGEMENT 3 credits.

Focuses on strategic issues in supply chain management or supply chain philosophy. Supply chain management is a cross-functional discipline that concentrates on the management of goods, services and information among all links in the supply chain. Enroll Info: None
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: Fall 2020

## OTM/MARKETNG 727 - ENTERPRISE SYSTEMS AND SUPPLY CHAIN MANAGEMENT

3 credits.
Provides an overview of enterprise systems and supply chain business processes. Introduces students to how enterprise systems are used to manage supply chains and make effective business decisions. Students will use SAP enterprise resource planning software throughout the course. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in an MBA program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: OTM 700 and GEN BUS 704

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## OTM 758 - MANAGING TECHNOLOGICAL AND ORGANIZATIONAL CHANGE <br> 3 credits.

Issues surrounding stretegic 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. Enroll Info: None
Requisites: OTM 700
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## OTM 760 - MANAGING BY DESIGN

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## OTM 765 - CONTEMPORARY TOPICS

1-4 credits.
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business
Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## OTM 799 - READING AND RESEARCH-OPERATIONS AND INFORMATION

 MANAGEMENT1-6 credits
Individual work suited to the needs of graduate students. Enroll Info: None

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
OTM 860 - SUSTAINABLE DESIGN OF INNOVATIVE PRODUCTS, SERVICES AND SYSTEMS
3 credits
Principles, concepts and methodology for innovative, sustainable approaches to design of products, services and systems. Enroll Info: None

Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015
OTM 861 - STRATEGIC SYSTEMS AND SUSTAINABILITY
3 credits
Innovative concepts and methodology that embed sustainability into strategic organizational systems. Enroll Info: None
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. Enroll Info: None
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
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. Enroll Info: None
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 2020

## OPHTHALMOLOGY AND VISUAL SCIENCES (OPHTHALM)

## OPHTHALM 699 - DIRECTED STUDY

1-5 credits
Directed study projects as arranged with faculty member. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## OPHTHALM 910 - INDEPENDENT READING AND RESEARCH FOR FOURTH YEAR MEDICAL STUDENTS <br> 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. Enroll Info: None 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

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. Enroll Info: None 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 2020

## OPHTHALM 919 - INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE IN OPHTHALMOLOGY <br> 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. Enroll Info: None
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

## PATHO-BIOLOGICAL SCIENCES (PATH-BIO)

PATH-BIO 150 - CONTEMPORARY TOPICS AND CAREERS IN THE VETERINARY SCIENCES
1 credit.

Designed to expose students to topics of importance to the animal health field as well as introduce them to the academic and professional options they will face as undergraduates. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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 2020
PATH-BIO 299 - INDEPENDENT STUDY
1-3 credits.
Enroll Info: Freshmen or Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, or 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 2020
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. Enroll Info: None
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 2020
PATH-BIO/HORT 500 - MOLECULAR BIOLOGY TECHNIQUES
3 credits.
Familiarize students with recombinant DNA technology through lectures as well as hands on exposure to methodologies used in molecular biology laboratories. Enroll Info: None
Requisites: (BIOCHEM 501, GENETICS 466, or MICROBIO 303) 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 2018
PATH-BIO 510 - VETERINARY IMMUNOLOGY
3 credits.
Current concepts in basic and clinical immunology with special emphasis on domesticated species and aspects of immunology important to students of veterinary medicine. Enroll Info: Vet Med st, basic crse in microbiology, or cons inst
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

PATH-BIO 512 - INTRODUCTION TO VETERINARY EPIDEMIOLOGY 2 credits

This course introduces 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. Enroll Info: Vet Med st or cons inst
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PATH-BIO 513 - VETERINARY VIROLOGY
2 credits.
Basic and clinical concepts of the viruses and diseases they cause in domesticated species. Enroll Info: Vet Med st, basic crse in microbiology, or cons inst
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: Vet Med st or cons inst
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PATH-BIO 515 - REGULATORY VETERINARY MEDICINE AND PUBLIC HEALTH
2 credits
Introduction to the preventive aspects of veterinary medicine as they relate to zoonoses, environmental hygiene and safety of foods of animal origins. Enroll Info: Vet Med st or cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020
PATH-BIO 517 - VETERINARY BACTERIOLOGY AND MYCOLOGY 4 credits.

Emphasis of the course is on the pathogenesis of bacterial and fungal diseases of animals. The laboratories will familiarize students with the methods used to identify representative bacterial and fungal pathogens. Enroll Info: Enrollment in the vet med pro curric or cons inst
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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 scenaria. Enroll Info: Yr 1 Vet Med crses Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
PATH-BIO 526 - ACTIVE, INTEGRATED LEARNING II
1 credit.
AActive 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 scenaria. Enroll Info: Yr 1 Vet Med crses
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: (CHEM 104 or CHEM 109) and (ZOOLOGY/BIOLOGY 101, 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 2020
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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Students should take both Veterinary Systemic Pathology I and II. Enroll Info: Vet Med st PATHBIO 559, or cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020

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. Students should take both Veterinary Systemic Pathology I and II. Enroll Info: Vet Med st, PATHBIO 560, or cons inst
Requisites: Declared in Veterinary Medicine program Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020

## PATH-BIO 660 - VETERINARY NECROPSY ROTATION

1 credit.
The course is designed to provide 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 for half days during the two week rotation. Enroll Info: None Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
PATH-BIO 675 - SPECIAL TOPICS
1-5 credits.
Topics vary. Enroll Info: Cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
PATH-BIO 681 - SENIOR HONORS THESIS
2-4 credits.
Enroll Info: Honors program candidacy
Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2017
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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: (PL PATH/ONCOLOGY 640 or PATH-BIO 513), M M \& I/PATHBIO/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 2020
PATH-BIO/M M \& I 773 - EUKARYOTIC MICROBIAL PATHOGENESIS 3 credits.

An advanced course focusing on the molecular, cellular and biochemical mechanisms found in fungal and protozoan pathogens of humans. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
PATH-BIO 775 - EXTERNSHIP
1-24 credits.

This course is an elective for fourth year veterinary medical students which offers faculty coordinated experience in the veterinary medical profession outside the School. Enroll Info: Vet Med st or cons inst
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

PATH-BIO/M M \& I 790 - IMMUNOLOGY OF INFECTIOUS DISEASE 3 credits.

Immunobiology and immunogenetics of resistance to infectious disease agents of man and animals; immunoregulatory mechanisms associated with evasion of host immunity. Enroll Info: M M \& I/PATH-BIO 720 and 740 required prior to enrollment.
Requisites: Consent of instructor
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2018
PATH-BIO 875 - SPECIAL TOPICS
1-6 credits

Will vary depending on course focus. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
PATH-BIO 920 - THESIS RESEARCH SEMINAR
1 credit.

Enroll Info: None
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.

Enroll Info: None
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

PATH-BIO 990 - RESEARCH
1-12 credits
Enroll Info: None
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

## 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. Enroll Info: None
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 2020

PATH 399 - INDEPENDENT STUDY
1-4 credits.

Directed study projects for freshmen and sophomores. Enroll Info: None 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

## PATH 404 - PATHOPHYSIOLOGIC PRINCIPLES OF HUMAN DISEASES

 3 credits.Primarily for students of pharmacy and nursing to provide a basic understanding of the causes, pathophysiology, pathology and clinical manifestations of disease states. Required course for pharmacy and nursing programs. Enroll Info: None
Requisites: ANAT\&PHY 335 or 435 (or PHYSIOL 335 or 435 prior to Fall 2018)

Repeatable for Credit: No
Last Taught: Spring 2020

PATH 699 - INDEPENDENT STUDY
1-4 credits
Directed study projects for juniors and seniors. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PATH 751 - CELL AND MOLECULAR BIOLOGY OF AGING
3 credits.
Cellular and molecular pathophysiology of human disease typically afflicting the aged, such as Alzheimer's, osteoporosis, Type II diabetes and arthritis, experimental systems to study aging. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PATH 802 - HISTOPATHOLOGY FOR TRANSLATIONAL SCIENTISTS 3 credits.

This course is unique among the graduate curricula, introducing students to 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. In addition to attending twice-weekly lectures, students will participate in weekly autopsy gross organ conferences as well as microscopic review sessions. In this way, the concepts covered in lectures will be applied and reinforced in the interactive autopsy sessions. Students will also observe at least one full autopsy, gaining a three-dimensional understanding of structure and disease. The grade for this course is derived from a final multiple-choice exam and a short essay regarding an autopsy case. At the conclusion of this course, students should: gain an appreciation of how disease processes directly impact patients; be able to distinguish the morphologic patterns of normal versus pathologic tissues; be familiar with the pathogenesis of selected common disease processes; and recognize how basic laboratory research may be applied to specific disease processes. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

## PATH 900 - SEMINAR

0 credits.
Weekly Seminar for graduate students, professional students, medical professionals. Enroll Info: None
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
PATH 901 - STUDENT SEMINAR / JOURNAL CLUB
1 credit.
Review of current publications on relevant topics selected by department faculty and trainer. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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: Fall 2020
PATH 925 - LABORATORY MEDICINE: CLINICAL TOXICOLOGY ELECTIVECSC

2-12 credits.

Toxicology is a subspecialty within clinical chemistry involving the testing of blood, urine, or other samples for the presence of toxic compounds, drugs, or drug metabolites with clinical relevance in addiction medicine, emergency medicine, infectious disease, and transplantation. Enroll Info: None
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 2012

## PATH 926 - PATHOLOGY: CLINICAL MICROBIOLOGY-MARSHFIELD

 2-12 credits.Clinical elective for fourth year medical students. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Declared in Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None Requisites: MED SCI-M 810, 811, 812 and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## PATH 963 - WOMEN'S GLOBAL HEALTH: A FOCUS ON WOMEN'S CANCERS AND PUBLIC HEALTH INTERVENTIONS <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## PATH 970 - GENOMICS, PROTEOMICS, AND METABOLOMICS: A DEEP DIVE INTO OMICS DATA ANALYSIS <br> 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. Enroll Info: None
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: Fall 2020

PATH 990 - RESEARCH
1-8 credits.
For Grad and medical students desiring advanced pathology; work done under the direction of a senior staff member. Enroll Info: None
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: Fall 2020

## PEDIATRICS (PEDIAT)

PEDIAT 699 - INDEPENDENT STUDY
0-5 credits.
Independent study projects as arranged with faculty or instructional staff. Enroll Info: None
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 2020

## PEDIAT 713 - PRACTICUM IN GENETICS COUNSELING

3 credits.
Introductory practicum in genetics counseling, designed to acquaint the student with the basic practice skills required, protocols used, and professional issues in genetics counseling. Clinical experiences in a variety of specialty clinics provide opportunities for initial development of interviewing, data collection, and counseling skills. Enroll Info: None Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PEDIAT 714 - PRACTICUM IN GENETICS COUNSELING

3 credits.
Second semester of the practicum in genetics counseling. Builds upon the first semester course (713) and provides additional opportunities to develop and improve skills in interviewing, data collection, case management and counseling. Enroll Info: None
Requisites: PEDIAT 713
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PEDIAT 721 - INTRODUCTION TO CLINICAL GENETICS

2 credits.
Study and integrate the mechanisms of clinical genetic disease at the microscopic, individual and macroscopic level. Provides foundational knowledge needed for future genetic counseling coursework and introduces and encourages discussion regarding the psychosocial and ethical concepts related to clinical genetics in a genetic counseling context. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PEDIAT 724 - CANCER GENETICS RISK ASSESSMENT AND
COUNSELING
2 credits.
Provides the background knowledge needed to provide cancer genetics counseling services. The information gained will be put into practice during the second year cancer rotation, collectively preparing students for clinical practice. 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. Enroll Info: None

Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PEDIAT 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). While specific for Genetic Counselor Studies students other healthcare providers are allowed if they have sufficient genetic background knowledge. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PEDIAT 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. Relevant, non-redundant topics will be scheduled over four consecutive semesters. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## PEDIAT 739 - RESEARCH STRATEGIES AND ANALYSIS IN CLINICAL GENETICS <br> 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. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PEDIAT 740 - LABORATORY GENETICS AND GENOMICS FOR THE GENETIC COUNSELOR <br> 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. Enroll Info: None
Requisites: PEDIAT 721
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PEDIAT 741 - INTERVIEWING AND COUNSELING FOR THE GENETIC COUNSELING I
1 credit.
This is the basic counseling and interviewing practice course for the Genetic Counselor Training Program. Course activities include role play, standardized patients, research/opinion paper, readings, and discussion. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PEDIAT 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. This course prepares the genetic counseling student for the prenatal clinical practicum. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PEDIAT 744 - APPLICATIONS OF BIOCHEMICAL GENETICS FOR GENETIC COUNSELORS

2 credits.
Introduces to the genetics counseling trainee applications of biochemical and molecular diagnostic tests in clinical practice and will review the major classes of inborn errors of metabolism. Enroll Info: None Requisites: Declared in Master of Genetic Counselor Studies program Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PEDIAT 745 - SEMINAR IN MEDICAL GENETIC COUNSELING RESEARCH 1 credit.

Includes invited speakers and journal club participation. Speakers are campus investigators whose research is relevant to medical genetics and genetic counseling. Participation in the Clinical Genetics Center journal club is required. Enroll Info: None
Requisites: Declared in Master of Genetic Counselor Studies program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

PEDIAT 813 - ADVANCED PRACTICUM IN GENETICS COUNSELING 4 credits.

A two semester program of clinical experiences which explores some of the pertinent professional issues in genetics counseling. The clinical experiences consist of four eight-week rotations which provide many opportunities for trainees to work toward perfecting skills in counseling, interviewing, data collection, case coordination and ongoing follow-along of genetics families. Enroll Info: None
Requisites: PEDIAT 714
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PEDIAT 814 - ADVANCED PRACTICUM IN GENETICS COUNSELING 4-5 credits.

The second of a two semester sequence of clinical experiences and didactics which provides opportunities for trainees to obtain professional competency in counseling, interviewing, and case coordination; to explore professional boundaries and limits; and learn strategies to develop a selfreflective practice. Enroll Info: None
Requisites: PEDIAT 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

PEDIAT 910 - INDEPENDENT READING AND RESEARCH IN PEDIATRICS 1-8 credits.

Independent research under the direct supervision of department of pediatrics faculty. Each students research project is individualized to meet student research goals within context of faculty research needs.

## Enroll Info: None

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

## 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. Enroll Info: None
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
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 selfdirected 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PEDIAT 942 - PEDIATRIC COMPLEX CARE ELECTIVE

2-4 credits.
Under direct supervision by faculty, participate in medical comanagement 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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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

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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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-toone tutorials. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
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

## 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. Enroll Info: None 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 2020
PHM SCI 420 - PHYSICOCHEMICAL PRINCIPLES OF DRUG FORMULATION AND DELIVERY

3 credits

Applications of physicochemical principles to pharmaceutical systems. Enroll Info: None

Requisites: Declared in Doctor of Pharmacy program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

PHM SCI 421 - INTRODUCTION TO BIOPHARMACEUTICS AND PHARMACOKINETICS
3 credits.
To integrate and utilize the knowledge obtained from chemistry, biochemistry, physiology, pathophysiology, and anatomy in order to develop an understanding of the fundamental principles governing biopharmaceutics, drug pharmacokinetics and drug pharmacodynamics.
Enroll Info: None
Requisites: PHM SCI 420 and PHYSIOL 335
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/
BOTANY 151, ZOOLOGY 153, or BIOCORE 383) and (CHEM 341 or 343)
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program Repeatable for Credit: No
Last Taught: Fall 2020

PHM SCI 490 - SELECTED TOPICS IN PHARMACEUTICAL SCIENCES
1-4 credits
Specialized subject matter of current interest to undergraduate and professional students. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2018

PHM SCI 491 - SELECTED TOPICS IN PHARMACEUTICAL SCIENCES
1-4 credits
Specialized subject matter of current interest to graduate students. Enroll Info: None

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

PHM SCI 493 - SELECTED TOPICS IN PHARMACEUTICAL SCIENCES 1-4 credits.

Specialized subject matter of current interest to graduate students. Enroll Info: None
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
PHM SCI/PHMCOL-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. Enroll Info: None
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 2020

## PHM SCI/PHMCOL-M 522 - PHARMACOLOGY II

3-4 credits.
Pharmacological actions of important drugs, including hematopoietic, thrombolytic, antihyperlipidemic, immunopharmacologic, anticancer, antiinflammatory, diuretic, antihypertensive, antianginal, and anti-arrhythmic agents, and agents used to treat congestive heart failure. Enroll Info:

## None

Requisites: PHMCOL-M/PHM SCI/PHMCOL-M 521
Repeatable for Credit: No
Last Taught: Spring 2020
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, antianxiety drugs, opioids, and antihistamines. Overview of drug metabolism and the clinical effects of metabolic drug interactions and genetic variability in drug metabolism genes. Enroll Info: None
Requisites: PHM SCI 432
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: PHM SCI 531
Repeatable for Credit: No
Last Taught: Spring 2020

## PHM SCI 540 - DRUG DELIVERY SYSTEMS FOR PHARMACOTHERAPY

 3 credits.The application of physical, chemical and biological principles to the study of drug delivery using a variety of solid, solution and disperse systems as dosage forms. Rationale for therapeutic use, formulation and manufacture, and evaluation of stability and bioavailability. Enroll Info:

## None

Requisites: PHM SCI 421 and concurrent enrollment in PHM SCI 542
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: PHM SCI 420
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info:

## None

Requisites: PHM SCI 541 and concurrent registration in PHM SCI 540
Repeatable for Credit: No
Last Taught: Fall 2020
PHM SCI 558 - LABORATORY TECHNIQUES IN PHARMACOLOGY AND TOXICOLOGY
2 credits.
Basic laboratory techniques employed in pharmacological and toxicological research. Enroll Info: None
Requisites: Declared in the Pharmacology and Toxicology undergraduate program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: PHMCOL-M/PHM SCI/PHMCOL-M 521
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: PHMCOL-M/PHM SCI/PHMCOL-M 522
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None

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 2020
PHM SCI/M\&ENVTOX/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. Enroll Info: None

Requisites: PHMCOL-M/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 2020

## 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. Enroll Info: None

Requisites: Declared in the Pharmacology and Toxicology undergraduate program
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Spring 2020

## PHM SCI 691 - SENIOR THESIS

2 credits
Individual study for seniors completing theses as arranged with a faculty member. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None

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 2020

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. Enroll Info: None

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: Fall 2020

## 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 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in the MS Pharmaceutical Sciences: Applied Drug Development
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None Requisites: Declared in the MS Pharmaceutical Sciences: Applied Drug Development
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
Requisites: Declared in the MS Pharmaceutical Sciences: Applied Drug Development
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. Enroll Info: None
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: Fall 2020

## PHM SCI 760 - CAPSTONE FOR APPLIED DRUG DEVELOPMENT

 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 the pharmaceutical and biopharmaceutical industry. Enroll Info: None
Requisites: Declared in the MS Pharmaceutical Sciences: 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. Enroll Info: None
Requisites: CHEM 561
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## PHM SCI 775 - POLYMERIC DRUG DELIVERY

2 credits.
Introduction to polymers used in drug delivery, specifically polymers used in the spatial and temporal control of drugs. Discussion of basic reactions for the synthesis of polymers, biodegradable polymers, watersoluble polymer-drug conjugates, polymer assembly and nanoscale devices, and stimuli-sensitive polymers. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: CHEM 345 and BIOCHEM 508
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## PHM SCI/B M E 801 - SEMINAR ON DEVELOPMENT OF MEDICAL DEVICES AND DRUGS

1 credit.

An overview of three major sectors of medical product and technology development including pharmaceuticals, medical devices and combination products. Regulatory framework, disclosure and patenting technical design and development strategy, academia-specific development challenges will be among the major lecture topics. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## PHM SCI 891 - HIGHLIGHTS AT THE CHEMISTRY-BIOLOGY INTERFACE

1 credit.

Principles of key discoveries at the chemistry-biology interface. This course is required of all Chemistry-Biology Interface trainees. Enroll Info: None
Requisites: 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

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. Enroll Info: None 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

## 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. Enroll Info: None Requisites: 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
PHM SCI 990 - RESEARCH
1-12 credits.
Independent research and writing for graduate and students under the supervision of a faculty member. Enroll Info: None
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

## PHM SCI 999 - ADVANCED INDEPENDENT STUDY

1-12 credits.
Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## 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. Enroll Info: None
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 2020
PHMCOL-M/PHM SCI 522 - PHARMACOLOGY II
3-4 credits.
Pharmacological actions of important drugs, including hematopoietic, thrombolytic, antihyperlipidemic, immunopharmacologic, anticancer, antiinflammatory, diuretic, antihypertensive, antianginal, and anti-arrhythmic agents, and agents used to treat congestive heart failure. Enroll Info:

## None

Requisites: PHMCOL-M/PHM SCI/PHMCOL-M 521
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: PHYSICS 104, 202, 208, or 248 or 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 2020

## PHMCOL-M/M\&ENVTOX/ONCOLOGY/PHM SCI/POP HLTH 625 TOXICOLOGY I <br> 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. Enroll Info: None
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 2020
PHMCOL-M/M\&ENVTOX/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. Enroll Info: None
Requisites: PHMCOL-M/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 2020
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. Enroll Info: None
Requisites: (BIOCHEM 501 or 507) and (BIOCORE 383, 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 2020
PHMCOL-M 699 - INDEPENDENT STUDY
1-3 credits.
Directed study projects for juniors and seniors. Enroll Info: None
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

## PHMCOL-M 739 - RIGOR, REPRODUCIBILITY AND BECOMING AN EFFECTIVE RESEARCHER <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PHMCOL-M 875 - SPECIAL TOPICS IN PHARMACOLOGY 1-3 credits.

Special topics in pharmacology. Topics may vary. Enroll Info: None
Requisites: 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
PHMCOL-M 901 - SEMINAR AND JOURNAL CLUB
1-2 credits.
Students and staff present research reports of current interest. Enroll Info: None
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

## PHMCOL-M 990 - RESEARCH

1-12 credits.
Research facilities of the department available to qualified students.
Enroll Info: None
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

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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 cocurricular and professional development experiences. Prepare students to successfully participate in the pharmacy admissions process. Enroll Info: None
Requisites: PHARMACY 125
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

## PHARMACY 490 - SELECTED TOPICS IN PHARMACY

1-2 credits.
Various topics related to the Pharmacy profession. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

PHARMACY/I SY 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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## PHARMACY 631 - PHARMACIST SERVICES MANAGEMENT

2 credits.
Provides a foundation for students/practitioners to develop, implement, and manage pharmacist services in a variety of practice environments. Students will work to develop, implement, or improve new pharmacy service products in practice environments using a marketing approach. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Spring 2014

## PHARMACY 635 - DRUG INTERACTIONS

1-2 credits.
Develops the student's ability to use physiological, pharmacological, physical-chemical, pharmacokinetic, and pharmacodynamic concepts to analyze and assess drug-drug interactions. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Declared in the Pharmacology and Toxicology undergraduate program or in the Doctor of Pharmacy program with second year standing Repeatable for Credit: No
Last Taught: Spring 2020

## PHARMACY 645 - PHARMACEUTICAL BIOTECHNOLOGY AND PHARMACOGENOMICS <br> 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. Enroll Info: None Requisites: PHM SCI 432 and Declared in the Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## PHARMACY 800 - RESEARCH ETHICS: SCIENTIFIC INTEGRITY AND THE RESPONSIBLE CONDUCT OF RESEARCH <br> 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. Enroll Info: None

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: Fall 2020

## 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. Enroll Info: None
Requisites: Not open to students declared in the Nursing, Physician Assistant, or Doctor of Pharmacy programs
Repeatable for Credit: No
Last Taught: Fall 2020

## 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). Enroll Info: None
Requisites: PHARMACY 423
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None

Requisites: Declared in Doctor of Pharmacy program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

PHM PRAC 462 - PROFESSIONAL DEVELOPMENT AND ENGAGEMENT IDEVELOPING YOUR PROFESSIONAL IDENTITY
1 credit.
Assists students with career exploration and recognition of how their knowledge, skills, abilities and values further their professional development. Helps students to (1) identify cultural disparities and inequities in access to quality healthcare; (2) demonstrate mutual respect and understanding towards healthcare team members to effectively collaborate and accomplish shared patient-related goals; (3) identify and prepare for future training and employment opportunities; (4) communicate their personal values, skills, and strengths; (5) implement the Continuous Professional Development Model for reflecting, learning, and evaluating progress throughout their career; and (6) act and communicate in a manner consistent with the trust given to pharmacists by patients, other healthcare providers, and society. Enroll Info: None Requisites: PHM PRAC 461
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PHM PRAC 463 - PROFESSIONAL DEVELOPMENT AND ENGAGEMENT II- CULTIVATING SELF- AWARENESS
1 credit.
Assist students to develop self-awareness and recognize how their knowledge, skills, abilities, and values further their professional development. Helps students to (1) describe concepts of self-awareness, self-observation, and self-insight to demonstrate behaviors that regulate emotions; (2) identify personal strengths and practice communicating these strengths to potential employers and preceptors; (3) create a professional curriculum vitae, cover letter, professional online profile (LinkedIn), and elevator speech to utilize during yearly Career Fair with employers and preceptors; (4) engage with other professional students to maintain a climate of mutual respect and shared values; (5) discuss cultural diversity and individual differences that characterizes patients, populations, and the health care team; and (6) demonstrate reflective behaviors and goal settings for academic and professional growth. Enroll Info: None
Requisites: PHM PRAC 461 and 462
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PHM PRAC 464 - PROFESSIONAL DEVELOPMENT AND ENGAGEMENT III: PROMOTING PROFESSIONAL ENGAGEMENT <br> 1 credit.

Assist students in becoming more engaged with the profession of pharmacy. Helps students to (1) describe concepts of professional engagement, advocacy, resiliency, and burnout; (2) demonstrate behaviors that regulate personal emotions and exhibit professionalism; (3) explain emotional intelligence and demonstrate effective communication skills to build professional relationships; (4) identify areas of interest related to professional engagement and patient advocacy; (5) complete related co-curricular activities for reflection on personal and professional growth; (6) engage diverse professionals to develop strategies to meet specific health and healthcare needs of patients and populations; (7) use the full scope of knowledge, skills, and abilities of professionals from health and other fields to provide care that is safe and equitable; and (8) engage in continuous professional and interprofessional development to enhance team performance and collaboration. Enroll Info: None
Requisites: PHM PRAC 461, 462, and 463
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Use the full scope of knowledge, skills, and abilities of professionals from health and other fields to provide care that is safe and equitable, and engage in continuous professional and interprofessional development to enhance team performance and collaboration. Enroll Info: None
Requisites: PHM PRAC 464
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020
PHM PRAC 470 - COMPUTER APPLICATIONS IN PHARMACY PRACTICE 2 credits.

Develops skills applicable to community and hospital pharmacy practice settings. Emphasis on database and computer applications unique to pharmacy practice. No prior computer experience or knowledge is necessary. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program
Repeatable for Credit: No
Last Taught: Fall 2014
PHM PRAC 490 - SELECTED TOPICS IN PHARMACY PRACTICE 1-4 credits.

Specialized Pharmacy subject matter of current interest to undergraduate and professional students. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

PHM PRAC 525 - INTRODUCTION TO PHARMACY PRACTICE EXPERIENCE III
1 credit.
The third of six in a three-year sequence which will introduce and expose second-year Doctor of Pharmacy students to the various roles of pharmacists and the many patient-care opportunities that exist in and out of traditional pharmacy practice settings. Enroll Info: None
Requisites: PHM PRAC 426
Repeatable for Credit: No
Last Taught: Fall 2020
PHM PRAC 526 - INTRODUCTION TO PHARMACY PRACTICE EXPERIENCE IV
1 credit.
The fourth of six in a three-year sequence which will introduce and expose second-year Doctor of Pharmacy students to the various roles of pharmacists and the many patient-care opportunities that exist in and out of traditional pharmacy practice settings. Enroll Info: None
Requisites: PHM PRAC 525
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: PHM SCI 421
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with second year standing
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: PHM PRAC 553 and 555
Repeatable for Credit: No
Last Taught: Spring 2020

PHM PRAC 555 - PHARMACOTHERAPY I
2 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. The content also incorporates issues regarding pharmacokinetics/dynamics, drug interactions, pharmacy practice, and patient counseling. Enroll Info: None
Requisites: PHM SCI 421
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: PHM PRAC 553 and 555
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with second year standing
Repeatable for Credit: No
Last Taught: Spring 2020

## PHM PRAC/NURSING 605 - PHARMACOTHERAPEUTICS FOR ADVANCED PRACTICE NURSES <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: PHM PRAC 611
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate standing or declared in the Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020
PHM PRAC 625 - INTRODUCTORY PHARMACY PRACTICE EXPERIENCE V
0 credits.
Experiences provided by this course permit students to integrate learning from previous didactic courses (drug literature review, pharmacotherapy, and patient/provider communications) into caring for patients. Students actively participate in patient care activities while under the supervision of a clinical instructor. Students must successfully complete all required Doctor of Pharmacy second year courses prior to enrollment. Enroll Info:

## None

Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020
PHM PRAC 626 - INTRODUCTORY PHARMACY PRACTICE EXPERIENCE VI
2 credits.
Experiences provided by this course permit students to integrate learning from previous didactic courses (drug literature review, pharmacotherapy, and patient/provider communications) into caring for patients. Students actively participate in patient care activities while under the supervision of a clinical instructor. Enroll Info: None
Requisites: PHM PRAC 625
Repeatable for Credit: No
Last Taught: Spring 2020
PHM PRAC 628 - PRACTICE INNOVATION I
1 credit.
Application of foundational knowledge of project management to handson 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: PHM PRAC 628
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: PHM PRAC 554, 556 and PHMCOL-M/PHM SCI 522
Repeatable for Credit: No
Last Taught: Fall 2020

PHM PRAC 650 - COMPREHENSIVE IMMUNIZATION DELIVERY 1 credit

Addresses vaccine-preventable diseases and the implementation of pharmacy-based immunization delivery programs. Enroll Info: None Requisites: Declared in Doctor of Pharmacy program with second year standing
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None Requisites: PHM PRAC 653 and 655
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: PHM PRAC 554 and 556
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: PHM PRAC 653, 655 and PHM SCI 623
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None

Requisites: PHM PRAC 656 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Spring 2020

## PHM PRAC 658 - MEDICATION MANAGEMENT IN AMBULATORY/

 PRIMARY CARE2 credits

Enhanced education and integration of knowledge skills regarding pharmacotherapeutic management of ambulatory patients with common disease states, including the pharmacist's role in patient education. Enroll Info: None

Requisites: PHM SCI 623 and PHM PRAC 655
Repeatable for Credit: No
Last Taught: Spring 2015

## 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. Enroll Info: None
Requisites: PHM PRAC 655
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020

## PHM PRAC/NUTR SCI 672 - HERBALS, HOMEOPATHY, AND DIETARY SUPPLEMENTS <br> 2-3 credits.

Covers regulations and clinical science regarding the use of herbals, homeopathic remedies, and dietary supplements, focusing on peerreviewed studies and integration with allopathic drugs; includes discussion of marketing issues. Enroll Info: None
Requisites: (PHM SCI 432 or BIOCHEM 501 or BMOLCHEM 314) and PHYSIOL 335
Repeatable for Credit: No
Last Taught: Spring 2016

## 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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program
Repeatable for Credit: No
Last Taught: Spring 2020

## PHM PRAC/NURSING 674 - SEMINARS IN INTERPROFESSIONAL MENTAL HEALTH CARE <br> 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. Enroll Info: None
Requisites: PHM PRAC 555
Repeatable for Credit: No
Last Taught: Spring 2020

## PHM PRAC 676 - SEMINAR IN GERIATRICS

2 credits.
Therapeutics topics pertaining to the pharmaceutical and medical care of the elderly. In addition, select topics on social aspects of aging will be presented. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with third year standing
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
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 Enroll Info: None
Requisites: PHM PRAC 655 or (NURSING 312 and NURSING 422)
Repeatable for Credit: No
Last Taught: Spring 2020
PHM PRAC 691 - SENIOR THESIS
2 credits.
Individual study for seniors completing theses as arranged with a faculty member. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020

## PHM PRAC 710 - GERIATRIC PHARMACY PRACTICE

2 credits
Interprofessional approach to the health care of the elderly. Focuses on topics and issues that are relevant to the safe and effective pharmacologic and non-pharmacologic management of conditions common in the elderly and will address socio- economic aspects of aging that could impact on the care of older adults. Enroll Info: None
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: Spring 2020

## PHM PRAC 711 - ONCOLOGY BIOMARKERS

2 credits.

Designed to develop an understanding of cancer related biomarkers and how they are used to effectively target individualized treatment to the patient. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2015

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
PHM PRAC 769 - CLINICAL RESEARCH AND PHARMACY
INVESTIGATION CLERSKSHIP
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. Enroll Info: None
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: Summer 2020
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. Enroll Info: None
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

## 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. Enroll Info: None

Requisites: 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

PHM PRAC 999 - ADVANCED INDEPENDENT STUDY
1-12 credits.

Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## PHILOSOPHY (PHILOS)

PHILOS 101 - INTRODUCTION TO PHILOSOPHY
3-4 credits
Enroll Info: Open to all students but preference will be given to Freshmen Sophomores who have had no previous philosophy course other than $210,211,253$ or 254.
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
PHILOS 104 - SPECIAL TOPICS IN PHILOSOPHY FOR FRESHMEN 3 credits.

Examination of selected topics. Enroll Info: Open to Fr with no prev college level coursework in philosophy
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
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. Enroll Info: None

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 1999

PHILOS 141 - THE MEANING OF LIFE
3-4 credits
This course enters the subject of philosophy through a question that is familiar to nearly every student: What is the meaning of life? This question will be approached through reading both classical philosophical works (Plato, Aristotle, Epictetus, Tolstoy, Kant) and the works of contemporary philosophers (Wolf, Nozick, Nagel, Kazez). Enroll Info: None
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 2020
PHILOS 201 - INTRODUCTION TO PHILOSOPHY FOR JUNIORS AND
SENIORS
3-4 credits.

Enroll Info: Open only to Jrs Srs who have had no previous philos courses other than 210, 211, 253 or 254
Requisites: Enrollment limited to students with Junior or Senior Standing Only
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: 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. Enroll Info: None
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 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. Enroll Info: MATH 096 or placement into MATH 141. MATH 118 does not fulfill the prerequisite
Requisites: MATH 96 or placement into MATH 141. MATH 118 does not fulfill the requisite
Course Designation: Gen Ed-Quantitative Reasoning Part A
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 2020

## PHILOS 211 - ELEMENTARY LOGIC

3-4 credits
The formal characteristics of logical truth and inference. Enroll Info: None 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## PHILOS 220 - PHILOSOPHY AND THE SCIENCES

3-4 credits.
This is a first course in philosophy of science, aimed at undergraduates who are interested in science. Throughout the course, the emphasis will be on understanding the logic of scientific reasoning. Students will learn the ABCs of deductive logic and probability reasoning, and will learn 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. Enroll Info: MATH 096 or placement into MATH 141. MATH 118 does not fulfill the prerequisite
Requisites: MATH 96 or placement into MATH 141. MATH 118 does not fulfill the requisite
Course Designation: Gen Ed-Quantitative Reasoning Part A
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 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.

## Enroll Info: None

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 2020

## PHILOS 243 - ETHICS IN BUSINESS

3-4 credits.
Case studies of moral issues in business; types or reasons appealed to for settlement. Enroll Info: So st
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: Fall 2020

PHILOS 304 - TOPICS IN PHILOSOPHY: HUMANITIES
3-4 credits.
Examination of selected topics in philosophy. Enroll Info: Requisite varies by topic
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: Summer 2020

## PHILOS 341 - CONTEMPORARY MORAL ISSUES

3-4 credits.
A philosophical study of some of the major moral issue in contemporary society, such as those concerning abortion, euthanasia, punishment,
property, politics, sex, nuclear disarmament, and world hunger. Enroll Info: None
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 2020

## 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. Enroll Info:

## None

Course Designation: Breadth - Either Humanities or Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Sophomore 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: No
Last Taught: Fall 2019

PHILOS 432 - HISTORY OF MODERN PHILOSOPHY
3-4 credits
This course covers various philosophers from the 17th century through early 20th century. Enroll Info: 3 credits of philosophy or consent of instructor

Requisites: Sophomore 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: No
Last Taught: Fall 2020
PHILOS 433 - 19TH CENTURY PHILOSOPHERS
3-4 credits.
Enroll Info: Jr st 3 cr in philos or cons inst
Requisites: None
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

## 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. Enroll Info: None

Requisites: 3 credits of 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. Enroll Info: Junior standing 3 credits in philos or consent of instructor
Requisites: Junior standing; not open to special students
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 2020

## 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. Enroll Info: None
Requisites: Undergraduate students with 3 credits in Philosophy or Institute of Environmental Studies or graduate student in IES Program
Course Designation: Breadth - Either Humanities or Social Science Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
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
PHILOS 454 - CLASSICAL PHILOSOPHERS
3 credits.
One or more classical philosophers, movements, or problems selected for intensive study. Enroll Info: None
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 2020

PHILOS 464 - CLASSICAL PHILOSOPHERS
3 credits.
One or more classical philosophers, movements, or problems selected for intensive study. Enroll Info: None
Requisites: Junior standing and completion of 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 2020

## PHILOS 481 - JUNIOR HONORS SEMINAR

3 credits.
One or more philosophers, movements, or problems selected for intensive study. Enroll Info: Jr st certif as hon cand, 6 cr in philos, 3.0 GPA in philos and cons inst

Requisites: Declared in 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 482 - JUNIOR HONORS SEMINAR
3 credits.
Same as 481. Enroll Info: Jr st 6 cr in philos 3.0 GPA in Philos-4.0 basis
Requisites: Declared in 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/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. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Fall 2019

## PHILOS/RELIG ST 502 - SPECIAL TOPICS IN PHILOSOPHY OF RELIGION <br> 3 credits.

One or more topics selected from among the following: religious discourse, God, evil, survival, great philosophers of religion, etc. Variable content. Enroll Info: None
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
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. Enroll Info: PHILOS 101, 103, 201, or cons inst; Jr st
Requisites: None
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 2020
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. Enroll Info: Jr st and 3 cr philos
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: Fall 2018

## 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). The first third of the class explores key issues in U.S. health policy and forms the empirical foundation for the rest of the class. The second third explores ongoing debates in moral and political philosophy over putative entitlements to health and health care. The last third 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. Enroll Info: None
Requisites: Junior standing or Senior standing or Graduate standing required.
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. Enroll Info: None

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

## 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. Enroll Info: None
Requisites: Enrollment limited to students with junior standing or higher and have taken 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 2020

## PHILOS 512 - METHODS OF LOGIC

3 credits.
Selected topics in philosophical logic and in the various applications of logic to philosophical problems. Variable content. Enroll Info: None
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 2020

## 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. Issues discussed can include: the use of coercive or intrusive public health interventions that restrict individual freedom, infringe upon individual privacy, and/or invite individual harm (or risks of harm); the justification of patemalistic measures in societies or sub-populations that seemingly indulge in pleasurable yet unhealthy behaviors; the extent to which societies should hold individuals responsible for their health conditions; the need to decide who receives life-saving treatment or vaccination when not all can; the need to choose between the identifiable victims we can save with expensive measures here and now and the more numerous unidentifiable victims we could save in the future with the same monetary investment; the trade-offs between maximizing aggregate health benefits and addressing the special needs of vulnerable social sub-groups and individuals; climate changes and intergenerational justice; ethical issues in international pharmaceutical research, and the need to establish reasonable limits to public health demands in a world where health outcomes are profoundly influenced by policies in other domains (such as transportation, housing, unemployment, and education) that generate their own ethical problems and imperatives. Enroll Info: None
Requisites: Junior standing or Senior standing or Graduate standing required.
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 2019

## 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. Enroll Info: None
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: No
Last Taught: Fall 2020
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. Enroll Info: None
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: No
Last Taught: Spring 2019

## PHILOS 521 - PHILOSOPHY OF THE SOCIAL SCIENCES

3 credits.
Problems in applying methods and concepts of science to the study of social behavior. Enroll Info: None
Requisites: Junior standing and completion of 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. Enroll Info: Requisite varies by topic
Requisites: None
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 <br> 3 credits.

Problems raised by genetics, evolutionary theory, and taxonomy: patterns of explanatory force and dispensability of teleology; objectivity of taxonomy. Enroll Info: 3 cr of philos or 3 cr in a biological science Requisites: None
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 2018
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. Enroll Info: None
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: Fall 2018

## PHILOS 530 - FREEDOM FATE AND CHOICE

3 credits.
Readings in Mill, James, Russell, Sartre and others to study the origin of the problem, clarify the issues, and attain a reasonable solution. Enroll Info: None
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: No
Last Taught: Fall 2020

## 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. Designed for upper-level undergraduates and graduate students. Enroll Info: None
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 2020

PHILOS 541 - MODERN ETHICAL THEORIES
3 credits.
Ethical theories and problems as discussed in the late nineteenth and twentieth centuries. Enroll Info: None
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: No
Last Taught: Fall 2020
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.
Enroll Info: Jr st 3 cr in philos or cons inst
Requisites: None
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 2020
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. Enroll Info: None
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 2016
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. Enroll Info: None
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: No
Last Taught: Fall 2020
PHILOS/ED POL 550 - PHILOSOPHY OF MORAL EDUCATION
3 credits.
Critical examination of classical and contemporary conceptions of moral
education. Enroll Info: None
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 2011

## 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. Enroll Info: None
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: No
Last Taught: Fall 2020
PHILOS 553 - AESTHETICS
3 credits.
Analysis of current philosophies of art and of criticism. Enroll Info: None Requisites: Junior standing and completion of 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 554 - PHILOSOPHY OF THE ARTIFICIAL SCIENCES

3 credits
Examination of issues surrounding artificial intelligence and artificial life; discussion of the natures of mind and life; evaluation of competing computational paradigms for modeling mind; analysis of contributions artificial sciences can make to psychology and biology. Enroll Info: None 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: No
Last Taught: Fall 2013
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. Enroll Info: None
Requisites: Junior standing and completion of 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: Fall 2018
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. Enroll Info: None
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: 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. Enroll Info: None
Requisites: Junior standing and completion of 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. Enroll Info: None
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

## PHILOS 559 - PHILOSOPHY OF LAW

3 credits.
Nature and function of law, relations between law and morality, logic of legal reasoning, analysis of fundamental concepts and institutions. Enroll Info: None
Requisites: Junior standing and completion of 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 2014

## PHILOS 560 - METAPHYSICS

3 credits.

Major problems in metaphysics, such as: existence, universals and particulars, space and time, individuals, categories, substance and attribute, necessity. Enroll Info: None
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: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Junior standing and completion of 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 2018

PHILOS/AGRONOMY/C\&E SOC/MED HIST 565 - THE ETHICS OF MODERN BIOTECHNOLOGY
3-4 credits.

Study of ethical issues arising from the application of modern biotechnology to microorganisms, crops, and non-human animals.
Readings cover moral theory, technology studies, political philosophy, the science used in biotechnology, and current regulations governing its use. Enroll Info: None
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: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: 3 credits of PHILOS
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## PHILOS/MATH 571 - MATHEMATICAL LOGIC

3 credits.
Basics of logic and mathematical proofs; propositional logic; first order logic; undecidability. Enroll Info: None
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 2019

## PHILOS 581 - SENIOR HONORS SEMINAR

3 credits.
Enroll Info: Certif as honors cand, Sr st 12 cr in philos, 3.2 GPA in philos
Requisites: Declared in 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.
Enroll Info: Sr st, 12 cr in philos, 3.2 GPA in philos
Requisites: Declared in 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.

Enroll Info: Jr or Sr st. Graded on a lettered basis; requires written cons inst approval of department chairman
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 2020
PHILOS 681 - SENIOR HONORS THESIS
1-3 credits.
Enroll Info: Honors cand, consult dept honors adviser
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 2020

PHILOS 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: Honors cand, consult dept honors adviser
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 2020

PHILOS 691 - SENIOR THESIS
3 credits.

## Enroll Info: None

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.
Continuation of 691. Enroll Info: PHILOS 691, consult adviser
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.

Enroll Info: Sr st. Graded on a Cr/N basis; requires written cons inst, approval of dept chairman needed
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.
Enroll Info: Sr st. Graded on a lettered basis; requires written cons inst, approval of dept chairman needed
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 701 - READING SEMINAR
3 credits.
An examination of select topics in philosophy. Enroll Info: None
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

PHILOS 799 - DIRECTED STUDY
1-3 credits.
Enroll Info: Grad st, written cons inst and dept chairperson
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

PHILOS/CLASSICS 830 - ADVANCED HISTORY OF PHILOSOPHY 3 credits.

Enroll Info: None
Requisites: 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
PHILOS 835 - ADVANCED HISTORY OF PHILOSOPHY
3 credits.
Enroll Info: None
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
PHILOS 838 - ADVANCED HISTORY OF PHILOSOPHY-KANT
3 credits.
Enroll Info: None
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 2012
PHILOS 902 - PROSEMINAR IN PHILOSOPHY
3 credits.
Provides the core material (across otherwise diverse specialties) required by all incoming graduate students in philosophy. There will be an emphasis on close reading of texts and writing skills in addition to the content of the course. Enroll Info: None
Requisites: Declared in Philosophy graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PHILOS 903 - SEMINAR: EPISTEMOLOGY
3 credits.
Enroll Info: None
Requisites: 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

## 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. Enroll Info:
None
Requisites: Declared in a Philosophy graduate program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PHILOS 911 - SEMINAR-LOGIC
3 credits.
Enroll Info: None
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
PHILOS 916 - SEMINAR-PHILOSOPHY OF LANGUAGE
3 credits.
Enroll Info: None
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

PHILOS 920 - SEMINAR-PHILOSOPHY OF SCIENCE:CAUSATION, EXPLANATION \& PROBABILITY
3 credits.
Enroll Info: None
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
PHILOS 941 - SEMINAR-ETHICS
3 credits.
Enroll Info: None
Requisites: 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

PHILOS 951 - SEMINAR-PHILOSOPHY OF MIND
3 credits.
Enroll Info: None
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
PHILOS 955 - SEMINAR SOCIAL AND POLITICAL PHILOSOPHY
3 credits.
Enroll Info: None
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

## PHILOS 960 - METAPHYSICS SEMINAR

3 credits.
Enroll Info: None
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
PHILOS 990 - RESEARCH AND THESIS
2-9 credits.

## Enroll Info: None

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
PHILOS 994 - RESEARCH IN ETHICS
2-9 credits.
Enroll Info: Consult major professor
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

## PHILOS 999 - INDEPENDENT WORK

2-9 credits.
Enroll Info: None
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

## PHYSICAL THERAPY (PHY THER)

## PHY THER 500 - FUNCTIONAL NEUROANATOMY FOR PHYSICAL THERAPY <br> 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. Enroll Info: None
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 2020

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. Enroll Info: None 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 2020

## PHY THER 512 - PRINCIPLES OF PROFESSIONAL PRACTICE AND ADMINISTRATION <br> 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. Enroll Info: None

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 2020

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. Enroll Info: None

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 2020

## PHY THER 523 - CARDIOVASCULAR AND PULMONARY ASPECTS OF PHYSICAL THERAPY TREATMENT <br> 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. Enroll Info: None
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 2020

## PHY THER 527 - FOUNDATIONS OF PHYSICAL THERAPY: EXAMINATION AND EVALUATION <br> 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. Enroll Info: None
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 2020

## PHY THER 534 - FOUNDATIONS OF PHYSICAL THERAPY INTERVENTION <br> 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. Enroll Info: None
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 2020

## PHY THER 538 - INTRODUCTION TO THE PHYSICAL THERAPY <br> PROFESSION AND PROFESSIONALISM <br> 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. Enroll Info: None
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 2020

## PHY THER 539 - PHYSICAL THERAPY EDUCCATION 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None 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 2020
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. Enroll Info: None
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 2020

## PHY THER 543 - PROFESSIONAL PRACTICE ISSUES IN PHYSICAL THERAPY <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
PHY THER 635 - MOTOR DONTROL 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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.
Enroll Info: None
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

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None 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 2020

## PHY THER 675 - OTHOTICS: APPLICATIONS IN PHYSICAL THERAPY PRACTICE <br> 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). Enroll Info: None
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 2020

## PHY THER 676 - MUSCULOSKELETAL DYSFUNCTION : EXAMINATION, DIAGNOSIS, \& MANAGEMENT I <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None 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 2020

## PHY THER 679 - PROSTHETICS: APPLICATIONS IN PHYSICAL THERAPY PRACTICE <br> 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. Enroll Info: None
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 2020

## PHY THER 700 - CLINICAL INTERNSHIP I

2 credits.
80-hour physical therapy internship in a pre-determined clinical environment. Enroll Info: None
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 2020

## PHY THER 701 - CLINICAL INTERNSHIP II

4 credits
160-hour physical therapy internship in a predetermined clinical environment. Enroll Info: None
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 2020
PHY THER 702 - CLINICAL INTERNSHIP III 9 credits

Nine-week physical therapy internship in a pre-determined clinical environment. Enroll Info: None
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 2020
PHY THER 703 - CLINICAL INTERNSHIP IV
9 credits.
Nine-week physical therapy internship in a pre-determined clinical environment. Enroll Info: None

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 2020

PHY THER 704 - CLINICAL INTERNSHIP V
4-9 credits.

Physical therapy internship in a pre-determined clinical environment.
Enroll Info: None
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 2020
PHY THER 705 - CLINICAL INTERNSHIP VI
9 credits.

Nine-week physical therapy internship in a pre-determined clinical environment. Enroll Info: None

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 2020

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). Enroll Info: None
Requisites: PHY THER 679
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PHY THER/NURSING/PHARMACY/PHY ASST/PUBLHLTH 758 NTERPROFESSIONAL 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. Enroll Info: None
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. Enroll nfo: None
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

## 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 physiologypathophysiology, pharmacology, laboratory medicine, and common systemic disease processes. There will also be instruction relative to cognitively approaching the patient. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020
PHY ASST 616 - PROFESSIONAL SEMINAR I
1 credit.
Emphasizes an understanding of basic research methodology, project development, collaborative research, and project evaluation. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020

## PHY ASST 618 - PROFESSIONAL SEMINAR III

1 credit.

Emphasizes an understanding of basic research methodology, project development, collaborative research, and project evaluation. Enroll Info:

## None

Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020

## PHY ASST 621 - ADVANCED PATIENT EVALUATION IN THE PRIMARY

 CARE SETTING II1 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020
PHY ASST 648 - EMERGENCY MEDICINE 2 credits.

Fundamental concepts related to the provision of emergency medical care and urgent ambulatory care. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Fall 2020

## PHY ASST 651 - DIAGNOSTIC METHODS II

3 credits.
Primary focus is laboratory medicine assessments, heart sounds
interpretation, and imaging modalities. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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). Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Spring 2020

## PHY ASST 662 - PREPARATION FOR INTERDISCIPLINARY HEALTH

CARE IN BELIZE
1 credit.
Preparation for PHY ASST 663. Examination of important and everchanging 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. Enroll Info: None
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 2020

## PHY ASST 663 - INTERDISCIPLINARY FIELD EXPERIENCE IN RURAL BELIZE <br> 1 credit.

One-week service-learning field experience in rural Belize. Provide health care to the more remote, indigenous populations of Belize. Enroll Info: 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

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Repeatable for Credit: No
Last Taught: Summer 2020

## PHY ASST 699 - INDEPENDENT STUDY

1-3 credits.

Directed study projects as arranged with instructor. Enroll Info: None 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 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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.

## Enroll Info: None

Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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: Fall 2020

## PHY ASST 749 - PHYSICIAN ASSISTANT PRECEPTORSHIP. INTERNAL MEDICINE <br> 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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 offcampus 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PHY ASST 787 - SEMINAR ON INTEGRATING PUBLIC HEALTH INTO PA PRACTICE <br> 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. Enroll Info: None
Requisites: Declared in Physician Assistant program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None 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: Fall 2020

## 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. Enroll Info: None 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: Fall 2020

## PHYSICS 115 - ENERGY

3 credits.
Introduction to energy, focusing on energy sources and the environment. Gives students the necessary physics background to form opinions on energy questions. The physical laws of thermodynamics, electricity, and magnetism, and nuclear physics in connection with energy-related topics such as: thermal pollution, fossil power, fission and fusion, nuclear power, and solar power. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR) A or special student standing. 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 2020
PHYSICS 198 - DIRECTED STUDY
1-3 credits.
Introductory-level mentored research project in physics. Enroll Info: None
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 2018

## PHYSICS 199 - DIRECTED STUDY

1-3 credits.
Introductory-level mentored research project in physics. Enroll Info: None
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
PHYSICS 201 - GENERAL PHYSICS
5 credits.
Calculus-based introduction to physics intended for engineering students. Mechanics: kinematics, statics, dynamics; energy and momentum. Enroll Info: None
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: Fall 2020
PHYSICS 202 - GENERAL PHYSICS
5 credits.
Calculus-based introduction to physics intended for engineering students. Electricity, magnetism, light, and sound. Enroll Info: None
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: Fall 2020

## PHYSICS 205 - MODERN PHYSICS FOR ENGINEERS

3 credits.
Introduction to atomic, solid state, and nuclear physics. Enroll Info: None
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: Fall 2019

## PHYSICS 206 - SPECIAL TOPICS IN PHYSICS

1-5 credits.
Special topics in physics at the intermediate undergraduate level. Enroll Info: None
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: Spring 2017

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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
\&\& Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020
PHYSICS 248 - A MODERN INTRODUCTION TO PHYSICS 5 credits.

Continuation of PHYSICS 247. Electromagnetism, circuits, optics, additional topics in modern physics; with computation. Enroll Info: None 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 2020

## 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. Enroll Info: None
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 2020

## PHYSICS/MED PHYS 265 - INTRODUCTION TO MEDICAL PHYSICS

 2 credits.Primarily for premeds and other students in the medical and biological sciences. Applications of physics to medicine and medical instrumentation. Topics: biomechanics, sound and hearing, pressure and motion of fluids, heat and temperature, electricity and magnetism in the body, optics and the eye, biological effects of light, use of ionizing radiation in diagnosis and therapy, radiation safety, medical instrumentation. Two lectures with demonstrations per week. Enroll Info: None
Requisites: PHYSICS 104, 202, or 208
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 2020
PHYSICS 298 - DIRECTED STUDY
1-3 credits.
Intermediate-level mentored research project in physics. Enroll Info: None
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 2020

## PHYSICS 299 - DIRECTED STUDY

1-3 credits.
Intermediate-level mentored research project in physics. Enroll Info: None 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 2020
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. Enroll Info: None
Requisites: PHYSICS 202 or concurrent enrollment, PHYSICS 208 or concurrent enrollment, or PHYSICS 248 or concurrent enrollment
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

## PHYSICS 307 - INTERMEDIATE LABORATORY-MECHANICS AND MODERN PHYSICS <br> 2 credits.

Experiments in quantum effects and modern physics, and statistical uncertainties and error propagation. This is mainly associated with the subject matter of PHYSICS 205, 241, 244, 247, or 249, so concurrent registration with one of these courses is recommended. Enroll Info: None Requisites: PHYSICS 202, 208, 248 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 2020

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: PHYSICS 202, 208, 248 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 2020

## 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 electromagmetism. Experiments for this course are covered in Physics 308. Enroll Info: None

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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2019
PHYSICS 406 - SPECIAL TOPICS IN PHYSICS
1-4 credits.
Special topics in physics at the advanced undergraduate level. Enroll Info: None

Requisites: PHYSICS 205, 241, 244, 249, or 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: Fall 2020

## 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. Enroll Info: None
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 2020

## PHYSICS 415 - THERMAL PHYSICS

3 credits.
Thermodynamics, kinetic theory of gases, and statistical mechanics. Enroll Info: None
Requisites: (PHYSICS 205, 241, 244, 249, or 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: Fall 2020

## 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. Enroll Info: None Requisites: (PHYSICS 205, 241, 244, 249, or 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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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. Enroll Info: None
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

## PHYSICS 499 - DIRECTED STUDY

1-3 credits.
Advanced-level mentored research project in physics. Enroll Info: None
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 2020

## PHYSICS/B M E/H ONCOL/MED PHYS 501 - RADIATION PHYSICS AND <br> 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. Enroll Info: None
Requisites: MATH 234 and (PHYSICS 241 or 249) 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

## PHYSICS 507 - GRADUATE LABORATORY

2 credits.
Perform typically advanced modern physics experiments and utilize advanced statistical techniques for data analysis. Scientific writing is emphasized. Enroll Info: None
Requisites: PHYSICS 307 and 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 2013

## 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 processing plasmas. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None

Requisites: 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (PHYSICS 205, 241, 244, 249, or 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: Fall 2020

## 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. Enroll Info: None
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 2020

## PHYSICS 545 - INTRODUCTION TO ATOMIC STRUCTURE

 3 creditsNuclear 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. Enroll Info: None
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 2020
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. Enroll Info: None 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. Enroll Info: None
Requisites: PHYSICS 205, 241, 244, 249, 448, 531, 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: Fall 2020

## PHYSICS/MED PHYS 563 - RADIONUCLIDES IN MEDICINE AND BIOLOGY <br> 2-3 credits.

Physical principles of radioisotopes used in medicine and biology and operation of related equipment; lecture and lab. Enroll Info: None
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

## PHYSICS 601 - SCIENTIFIC PRESENTATION

2 credits.
Oral and written reports to give practice in the presentation of scientific papers. Enroll Info: None
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. Enroll Info: None
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: Spring 2020
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. Enroll Info: None
Requisites: PHYSICS 104, 202, 208, or 248 or 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 2020

## PHYSICS 623 - ELECTRONIC AIDS TO MEASUREMENT

4 credits.
Fundamentals of electronics, electronic elements, basic circuits; combinations of these into measuring instruments. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
PHYSICS 681 - SENIOR HONORS THESIS
3 credits.
Mentored individual research and study for students completing Physics
Honors in the Major. Enroll Info: None
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 2020
PHYSICS 682 - SENIOR HONORS THESIS
3 credits.
Mentored individual research and study for students completing Physics Honors in the Major. Enroll Info: None
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 2020

## PHYSICS 691 - SENIOR THESIS

2-3 credits
Mentored individual research and study for students completing a thesis.
Enroll Info: None
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

## PHYSICS 692 - SENIOR THESIS

2-3 credits
Mentored individual research and study for students completing a thesis. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## PHYSICS 709 - INTRODUCTION TO QUANTUM COMPUTING

 3 creditsA 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: Deustch, Simon, Shor, Grover, and adiabatic algorithms. Basic quantum error correction: 5-qubit, Steane and Shor codes. Enroll Info: 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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-idea 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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. Enroll Info: PHYSICS 721
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: PHYSICS 322 or equiv
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: 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 2020

## 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. Enroll Info: 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 2019

## 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. Enroll Info: 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 2020

## PHYSICS 731 - QUANTUM MECHANICS

3 credits.
Schrodinger equation, operator theory, matrix mechanics, transformation theory, Heisenberg representation, orbital angular momentum, boundstate problems, scattering theory, stationary perturbation theory, degenerate systems, time-dependent perturbation theory, Born approximation, other approximation methods. Enroll Info: 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 2020

## 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. Enroll Info: PHYSICS 721731
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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 2020
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. Enroll Info: 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 2019
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. Enroll Info: Knowledge of lasers [such as PHYSICS/ E C E 546] and graduate-level electromagnetics [such as EC 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: Fall 2011

## 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. Enroll Info: 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 2017

## PHYSICS/E C E/N E 749 - COHERENT GENERATION AND PARTICLE BEAMS <br> 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. Enroll Info: None
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. Enroll Info: 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. Enroll Info: PHYSICS 721 or 322, basic knowledge of spec 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 2020

## PHYSICS/B M E/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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
Requisites: PHYSICS 531 or 731
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020
PHYSICS 799 - INDEPENDENT STUDY
1-3 credits.
Graduate-level mentored research project in physics. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PHYSICS 801 - SPECIAL TOPICS IN THEORETICAL PHYSICS
1-3 credits.
Selected topics in theoretical physics. Enroll Info: None
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

PHYSICS 805 - SPECIAL TOPICS IN PHYSICS
1-3 credits

Special topics in physics at the graduate level. Enroll Info: None 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

PHYSICS 831 - ADVANCED QUANTUM MECHANICS
3 credits.
Quantum theory of free and interacting fields, formal scattering theory, dispersion theory. Enroll Info: PHYSICS 732
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PHYSICS 832 - ADVANCED QUANTUM MECHANICS

3 credits.
Continuation of PHYSICS 831. Quantum theory of free and interacting
fields, formal scattering theory, dispersion theory. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: 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. Enroll Info: 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 2013
PHYSICS/ASTRON 910 - SEMINAR IN ASTROPHYSICS
0-1 credits.

Current topics in astrophysics. Enroll Info: None
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

## PHYSICS/E C E/N E 922 - SEMINAR IN PLASMA PHYSICS

$0-1$ credits.
Current topics in plasma physics. Enroll Info: None
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
PHYSICS 951 - SEMINAR-SOLID STATE PHYSICS
0-1 credits.
Current topics in solid state physics. Enroll Info: None
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 2012

## PHYSICS 990 - RESEARCH

1-12 credits.
Research supervised by individual faculty members. Enroll Info: None 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

## PHYSIOLOGY (PHYSIOL)

## PHYSIOL 699 - INDEPENDENT WORK

1-4 credits
Directed study projects for juniors and seniors. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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

## PLANT PATHOLOGY (PL PATH)

## PL PATH/BOTANY 123 - PLANTS, PARASITES, AND PEOPLE

 3 creditsThe course will explore the interaction between society and plantassociated 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 "studentsourcing antibiotic discovery." Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: PL PATH/HORT 261 or concurrent enrollment
Repeatable for Credit: No
Last Taught: Fall 2020

## PL PATH 289 - HONORS INDEPENDENT STUDY

1-2 credits.
Enroll Info: Enrolled in the CALS Honors Prgm Sophomore or Junior standing. INTER-AG 288
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.
Enroll Info: Open to Freshmen, Sophomore or Junior standing written consent of instructor
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

PL PATH 300 - INTRODUCTION TO PLANT PATHOLOGY
4 credits.
Economic importance, symptoms, causes, and methods of control of representative plant diseases. Enroll Info: Intro course in bot
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## PL PATH/F\&W ECOL/HORT/LAND ARC 309 - DISEASES OF TREES AND SHRUBS <br> 3 credits.

Fundamental disease concepts, pathogens and causal agents, diagnosis, and biologically rational principles and practices for management of diseases of trees and shrubs. Enroll Info: Includes field trips
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152, 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. Enroll Info: Sophomore standing
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. In the laboratory section, we will use current molecular, bioinformatic, and statistical approaches to characterize rhizosphere microbiomes from samples collected as part of on-going research projects. Enroll Info: None
Requisites: Graduate/professional standing or (ZOOLOGY/BIOLOGY/ BOTANY 151,ZOOLOGY/BIOLOGY 101 and 102, BOTANY/BIOLOGY 130, or BIOCORE 381) and STAT 301 or 371
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152, or ZOOLOGY/
BIOLOGY 101 and 102, or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: A 5 cr intro crse in botany
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: Spring 2020

## 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 biological, ecological and economic significance. Enroll Info: None
Requisites: BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY/BOTANY 151 and ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 381 AND 382 or graduate/professional standing. Not open to students with credit for BOTANY/PL PATH 332
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 2020
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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019

## PL PATH/ENVIR ST 368 - ENVIRONMENTAL LAW, TOXIC SUBSTANCES, AND CONSERVATION

2 credits.
Development of and need for "environmental law"; an introduction to the legal system; public and private rights in the environment; regulation of pesticides and toxic substances; environmental legislation and rulemaking; environmental impact statements; professionals as expert witnesses. No prior knowledge of law assumed. For scientists and others dealing with environmental issues in academia, industry and government. Enroll Info: So st
Requisites: None
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 2013
PL PATH 375 - SPECIAL TOPICS
1-4 credits.
Subjects of current interest to undergrads. Enroll Info: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

PL PATH 399 - COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION 1-8 credits.

Enroll Info: So, Jr or Sr st and cons supervising inst, advisor, and internship program coordinator
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, 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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Repeatable for Credit: Yes, unlimited number of completions

## PL PATH/BOTANY/ENTOM 505 - PLANT-MICROBE INTERACTIONS: MOLECULAR AND ECOLOGICAL ASPECTS <br> 3 credits.

Molecular and ecological aspects of the interactions between plants and microorganisms. This course 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. Enroll Info: An upper level crse in microbiol (e.g. Bact 303); biochem (e.g. BIOCHEM 501); genetics (e.g. GENETICS 466) or cons inst 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: No
Last Taught: Spring 2020

## 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. Enroll Info: Previous coursework in plant pathology, genetics and/or plant breeding, or consent of instructor
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: PL PATH 300 or equiv or cons inst 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: 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. Plant disease clinic, field trips, lectures and lab. Enroll Info: Plant Path 300332
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2019

## PL PATH 590 - CAPSTONE IN PLANT PATHOLOGY

1-4 credits.
Synthesizing research-based capstone experience for students majoring in Plant Pathology. Students will 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. Enroll Info: None 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 2020

## 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. Enroll Info: Knowledge equiv to that obtained in PL PATH 300, BOTANY/PL PATH 332, STAT/F\&W ECOL/HORT 571, Math 212, PI Path 616 or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 or BOTANY/BIOLOGY 130 or 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 Sustain - Sustainability
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. Enroll Info: A course in advanced bacteriology; GENETICS 466 or equiv; BIOCHEM 501 or equiv; or cons inst
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: No
Last Taught: Fall 2019

## PL PATH/ONCOLOGY 640 - GENERAL VIROLOGY-MULTIPLICATION OF VIRUSES <br> 3 credits.

Bacterial and animal viruses, their structure, multiplication, and genetics.
Enroll Info: None
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: No
Last Taught: Fall 2020

## PL PATH/BOTANY/GENETICS/M M \& I 655 - BIOLOGY AND GENETICS OF FUNGI <br> 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. Enroll Info: Graduate or professional standing 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 2020

## PL PATH 681 - SENIOR HONORS THESIS

2-4 credits.
Enroll Info: Honors candidacy
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.
Continuation of 681. Enroll Info: Honors program candidacy PL PATH 681
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.
Enroll Info: Sr st cons inst
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 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PL PATH 800 - INQUIRY-BASED BIOLOGY TEACHING

1-2 credits.
The goal is for students to develop competence and confidence as teachers. The course covers fundamentals of learning theory and practical strategies for teaching biology. Students practice lecturing, manage classroom dynamics, and teach laboratory sections (optional). Enroll Info: None
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.
Students will learn about mentoring and/or instructional materials.
Students have two options: (a) practice mentoring undergraduate researchers with feedback and evaluation and/or (b) develop and evaluate instructional materials. This course builds on content from Plant Pathology 800. Enroll Info: PL PATH 800 or con reg
Requisites: 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
PL PATH 875 - SPECIAL TOPICS
1-4 credits.
Topics of current interest to Grad students. Enroll Info: None
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

## PL PATH 923 - SEMINAR

1 credit.
Enroll Info: None
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
PL PATH/BOTANY 930 - SEMINAR-MYCOLOGY
1 credit.
Enroll Info: None
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
PL PATH 990 - RESEARCH
1-9 credits.
Enroll Info: None
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

## 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. Enroll Info: None Requisites: First year 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 <br> 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. Enroll Info: None
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: Fall 2020

## POLI SCI 120 - POLITICS AROUND THE WORLD

4 credits.
Comparison of politics and government in selected countries around the world. Enroll Info: Not open to students with credit for POLI SCI 182 (or POLI SCI 186 prior to fall 2017)
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: Fall 2020

## 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: 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: Fall 2020

## POLI SCI 170 - RESEARCH METHODS IN POLITICAL SCIENCE

 3 credits.Introduces students to political science as a discipline by focusing on the development of research questions, research designs, and the quantitative and qualitative tools commonly used to implement research designs. Enroll Info: Not open to students with credit for POLI SCI 200 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: Fall 2020

## POLI SCI 182 - POLITICS AROUND THE WORLD (HONORS)

 3 credits.Comparison of politics and government in selected countries around the world. Enroll Info: None
Requisites: Declared in honors program
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 2020

## 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020

## POLI SCI 202 - PREPARATION FOR THE WISCONSIN IN WASHINGTON PROGRAM <br> 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. Enroll Info: None
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. Enroll Info: None
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: Fall 2013

## 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. Enroll Info: 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 207 - INTRODUCTION TO AFRO-AMERICAN POLITICS 3-4 credits.

Survey of the political conditions in Black America. Enroll Info: None
Requisites: POLI SCI 104, POLI SCI 184, or LEGAL ST/POLI SCI 217
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 2013
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. Enroll Info: None
Requisites: Freshmen 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: Fall 2020
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. Enroll Info: None
Requisites: Freshmen 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: Spring 2020

## POLI SCI/ASIAN/GEOG/HISTORY/SOC 244 - INTRODUCTION TO SOUTHEAST ASIA: VIETNAM TO THE PHILIPPINES <br> 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 21 st century, including an exposure to region's contemporary literature. Enroll Info: 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 2020

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. Enroll Info: None
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 2019

## 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. Enroll Info:

## None

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 2020

## POLI SCI/ASIAN/E A STDS/HISTORY 255 - INTRODUCTION TO EAST ASIAN CIVILIZATIONS <br> 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. Enroll Info: None

## 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
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. Enroll Info: None 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. Enroll Info: None
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: Summer 2020

## POLI SCI 265 - DEVELOPMENT OF ANCIENT AND MEDIEVAL WESTERN POLITICAL THOUGHT <br> 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. Enroll Info: 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 266 - THE DEVELOPMENT OF MODERN WESTERN POLITICAL THOUGHT <br> 3-4 credits.

Exploration of core problems in modern European political thought, such as the nature and origins of obligation, the relationship between religion and politics, and representation, through a selection of modern sources. Enroll Info: Not open to students with credit for POLI SCI 502 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: Fall 2019

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. Enroll Info: None
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

## POLI SCI 270 - UNDERSTANDING POLITICAL NUMBERS <br> 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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None 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: Fall 2020

## 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. Enroll Info: None
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 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. Enroll Info: 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: Fall 2019
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. Enroll Info: Not open to students with credit for POLI SCI 462 prior to fall 2017
Requisites: POLI SCI 104, POLI SCI 184, LEGAL ST/POLI SCI 217,
CHICLA 201, or AFROAMER 151
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 2020

## 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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
POLI SCI 309 - CIVIL LIBERTIES IN THE UNITED STATES
3-4 credits.
American constitutional context, rights of conscience and expression; rights of defendants; equal protection of the laws; vindication of rights; proposals for reform. Enroll Info: Not open to students with credit for POLI SCI 471 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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: Summer 2014

## POLI SCI 311 - UNITED STATES CONGRESS

3-4 credits.
Principles, procedures and problems of the legislative process of the United States Congress. Enroll Info: Not open to students with credit for POLI SCI 426
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2020
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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: None
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: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Sophomore standing, POLI SCI 104 or 140
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 321 - LATIN-AMERICAN POLITICS

3-4 credits.
Contemporary political problems in Latin America; emphasis on political economy, political instability, social movements, and democratization.
Enroll Info: 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\&S Credit - Counts 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

## 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. Enroll Info: 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. Enroll Info: None 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 - POLITICAL POWER IN CONTEMPORARY CHINA

3-4 credits
Analysis of the major institutions, ideas, people and groups in China today and their impact on power, decision-making and social change. Enroll Info: Not open to students with credit for POLI SCI 642 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 2017

## 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 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. Enroll Info: Not open to students with credit for POLI SCI 660 prior to fall 2017
Requisites: Sophomore standing and POLI SCI 120, 182, or 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\&S Credit - Counts 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 330 - POLITICAL ECONOMY OF DEVELOPMENT

3 credits.
An introduction to the political economy of development. The course asks why are some countries are rich and others poor. To help answer this question, the course examines leading theories of economic development. In light of these theories, the course highlights the development experiences of three major regions of the world: the West, East Asia, and the former Communist Block. The course considers a series of issues about development, including the effect of ethnic diversity, corruption, natural resources and women's empowerment on economic development concluding with an examination of the effects of the international interactions--via trade, foreign aid, migration and war--on economic development. Enroll Info: None
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 2020

## POLI SCI 332 - GERMAN POLITICS

3-4 credits.
A broad overview of politics in Germany, Europe's politically and economically most powerful country. The course is structured around several broad themes: 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. Throughout the semester, we will relate the German experience to broader issues, problems, and concepts used in the comparative study of domestic politics. Enroll Info: None
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 2020

## POLI SCI 334 - RUSSIAN POLITICS

3-4 credits
Theory and practice of Russian States, emphasis on politics, economic and institutional developments since 1991. Enroll Info: 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\&S Credit - Counts 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

## 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 Enroll Info: None
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

## POLI SCI 340 - THE EUROPEAN UNION: POLITICS AND POLITICAL ECONOMY <br> $3-4$ credits

Introduction to the history and theory of European integration. Topics include the workings of EU institutions and law, the effect of the EU on national politics and economy, economic politics and policy-making in the EU, the EU as an actor in the world economy. Students who have taken POLI SCI 338 prior to Fall 2017 may not enroll in this course. Enroll Info: None
Requisites: 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 - Intermediate
L\&S Credit - Counts 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 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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: 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 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. Enroll Info: 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: Spring 2020
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. Enroll Info: None
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. Enroll Info: 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: Spring 2020

## POLI SCI 351 - POLITICS OF THE WORLD ECONOMY

3-4 credits.
Power conflict at the international economic level and its impact on the politics of various nations, regions, and interests. Enroll Info: Not open to students with credit for POLI SCI 312 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: Spring 2013

## 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. Enroll Info: 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. Enroll Info: None 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 2020

## 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 nongovernmental 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. Enroll Info: 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: Fall 2019

## 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 21 st century including how the US has responded to the attacks of September 11, 2001, the effectiveness of foreign aid policy. Enroll Info: None
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 2020

## 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. Enroll Info: 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: Spring 2019
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 21 st 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. Enroll Info: 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: Spring 2020

## 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. Enroll Info: 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 2019

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. Enroll Info: None
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 2020
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. Enroll Info: 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 2020
POLI SCI 374 - INTRODUCTION TO STATISTICAL INFERENCE FOR

## POLITICAL RESEARCH

3-4 credits.
Basic statistics course intended to provide students skills essential to read quantitative literature in Political Science and use basic empirical analyses. Fundamentals of probability theory and statistical inference up through bivariate regression and correlation. Enroll Info: Not open to students with credit for POLI SCI 551 prior to fall 2017
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 2013

## 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. Enroll Info:

## None

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 2019
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. Enroll Info: None

## 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. Enroll Info: None
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

## POLI SCI 401 - SELECTED TOPICS IN POLITICAL SCIENCE

3-4 credits.
A topics course for the exploration of current issues in Political Science. Enroll Info: None
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

## POLI SCI 402 - WISCONSIN IN WASHINGTON INTERNSHIP COURSE

 4 creditsThis 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 introduces 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. Enroll Info: None
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. Enroll Info: None
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 2012

## 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. Enroll Info: None
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 2020

## POLI SCI 409 - AMERICAN PARTIES AND POLITICS

3-4 credits
Electoral, organizational, and governmental roles of political parties at national and state levels, with emphasis on changes in response to historical and contemporary circumstances. Enroll Info: Not open to students with credit for POLI SCI 424 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2013

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. Enroll Info: Not open to students with credit for POLI SCI 425 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 SCl 411 - THE AMERICAN CONSTITUTION : POWERS AND STRUCTURES OF GOVERNMENT <br> 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2019

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. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2020
POLI SCI 415 - THE SEPARATION OF POWERS AND FEDERAL COURTS 3 credits.

The goal of this class is to teach students how political institutions create and influence the federal courts. We will examine various concepts such as the creation of courts, the appointment process, jurisdiction, statutory interpretation, legislative encroachment into the judicial process, and other inter-institutional relationships. Enroll Info: Sophomore standing
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 416 - COMMUNITY POWER AND GRASS ROOTS POLITICS

 3 credits.This course is designed to introduce students involved in volunteer or community activism in the Madison area to the literature on political power and community organizing. Students are required to conduct field research and write an analysis of their activities. Enroll Info: Not open to students with credit for POLI SCI 428 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2020

## 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. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2020

## POLI SCI/PUB AFFR 419 - ADMINISTRATIVE LAW

3-4 credits.
Delegation of powers, elements of fair administrative procedure, judicial control over administrative determination. Enroll Info: Not open to students with credit for POLI SCI 420 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2019

## 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. Enroll Info: 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
SCl 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. Enroll Info: None
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.

This course serves as an introduction to the major empirical and theoretical themes in the study of mobilization in Latin America. Enroll Info: Sophomore standing
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/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. Enroll Info: 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: Fall 2020

## POLI SCI/INTL ST 431 - CONTENTIOUS POLITICS

3-4 credits.
Social movements, revolutions, and riots continually shape and reshape 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. Enroll Info: None 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: Spring 2017
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. Enroll Info: Not open to students with credit for POLI SCI 617 prior to fall 2017
Requisites: POLI SCI 120, 182, or 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. Enroll Info: None
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. Enroll Info: 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 2020

## POLI SCI/INTL ST 436 - POLITICAL INEQUALITY: MEASURES, CAUSES,

 EFFECTS AND REMEDIES3 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. Enroll Info: None
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

## 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. Enroll Info: None

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

## 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. Enroll Info: 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\&S Credit - Counts 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/INTL ST 439 - THE COMPARATIVE STUDY OF GENOCIDE

 3-4 creditsExamines 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 21 st centuries. Enroll Info: 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\&S Credit - 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 2020

## 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. Enroll Info: None

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
Sustain - Sustainability
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 PanAfricanism, 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. Enroll Info: Not open to students with credit for POLI SCI 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. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI
SCl 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: Fall 2020

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. Enroll Info: None

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: Fall 2020

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 104, 184, or 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 2020

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. Enroll Info: None
Requisites: Junior standing and declared in an honors program
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
Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 503 - CONTEMPORARY POLITICAL THOUGHT
3-4 credits.

A survey of influential works and themes in contemporary political theory, considering such topics as distributive justice, democratic deliberation, multiculturalism, community, pragmatism, and the existential challenges of liberalism. Enroll Info: Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken 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 - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2013

## POLI SCI 508 - AMERICAN NATIONAL SECURITY: POLICY AND PROCESS <br> 3-4 credits.

Policy-oriented course covering defense, domestic politics, defense economics, alliances, and arms control in the context of American national security in the post-World War II era. Enroll Info: Not open to students with credit for POLI SCI 442 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or LEGAL ST/
POLI SCI 217)
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 2013

## 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. Enroll Info: Not open to students with credit for POLI SCI 446 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or LEGAL ST/ POLI SCI 217)
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 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. Enroll Info: Not open to students with credit for POLI SCI 466 prior to fall 2017 Requisites: Sophomore standing and (POLI SCI 104, 184, or LEGAL ST/ POLI SCI 217)
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 2020

## POLI SCI 514 - INTEREST GROUP POLITICS

3-4 credits

Internal politics of labor unions, business and professional associations, and farm groups; techniques employed in advancing their policies in government. Enroll Info: Not open to students with credit for POLI SCI 472 prior to fall 2017
Requisites: Sophomore standing and (POLI SCI 104, 184, or LEGAL ST/
POLI SCI 217)
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 2014

## 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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2013

## POLI SCI 516 - POLITICAL COMMUNICATIONS

3-4 credits
Effects of communications on elite and mass political beliefs; the characteristics and functions of political language; politics and the media; symbolic politics. Enroll Info: Not open to students with credit for POLI SCI 479 prior to fall 2017
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
Last Taught: Spring 2014
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. Enroll Info: None
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\&S Credit - Counts 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 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. Enroll Info: 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\&S Credit - Counts 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 534 - SOCIALISM AND TRANSITIONS TO THE MARKET

 3-4 creditsCourse 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. Enroll Info: 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. Enroll Info: Not open to students with credit for POLI SCI 656 prior to fall 2017
Requisites: POLI SCI 104, 120, 140, 160, 182, 184, 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 creditsAn 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. Enroll Info: None

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 552 - MULTIVARIABLE STATISTICAL INFERENCE FOR
POLITICAL RESEARCH
3-4 credits
Extensive treatment of multiple regression and its variants. Enroll Info: None
Requisites: POLI SCI 374 (or POLI SCI 551 prior to Fall 2017)
Course Designation: Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2012

## POLI SCI 561 - RADICAL POLITICAL THEORY

3-4 credits
Explores in depth Marxist and other radical critiques of liberal democracy that have been influential in the 20th century. Students who have taken POLI SCI 513 prior to Fall 2017 may not enroll in this course. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 160 or ILS 205) or (POL
SCI 209 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 2014

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. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: 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". Enroll Info: None
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 654 - POLITICS OF REVOLUTION

3-4 credits.

An analysis of the causes, methods, processes, and consequences of revolutionary movements. Enroll Info: None
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
Last Taught: Fall 2011
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. Enroll Info: None
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/JEWISH 665 - ISRAELI POLITICS AND SOCIETY
3-4 credits.
Course provides historical and analytical understanding of Israeli internal political life and institutions. Attention will be paid to political culture, coalition formation and ethnic politics as they are manifested in Israeli politics. The effect of regional conflict upon Israel's domestic politics will also be considered. Enroll Info: None
Requisites: Sophomore standing and (POLI SCI 104, 120, 140, 182, 184,
INTL ST 101 or 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 - Advanced
L\&S Credit - Counts 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.
Enroll Info: None
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). Enroll Info: None
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. Enroll Info: Enrollment in Honors Progm; Sr st; cons inst
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 2020

## 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. Enroll Info: None
Requisites: Enrollment limited to senior standing and completion of POLI SCI 683 and admission to 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 2020

## POLI SCI 685 - HONORS RESEARCH INTERNSHIP IN POLITICAL <br> SCIENCE <br> 1-3 credits.

The internship program is designed to provide honor students with opportunities to work closely with faculty on research projects of mutual interest. Enroll Info: Political science major; in honors prgm; cons inst
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 2015

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. Enroll Info: None
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. Enroll Info: None
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
POLI SCI 692 - SENIOR THESIS
3 credits.
For students writing a thesis in consultation with a faculty member. Enroll Info: None
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

## POLI SCI 698 - DIRECTED STUDY

1-4 credits
Directed study projects for juniors and seniors as arranged with a faculty member. Enroll Info: None
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 2020

## POLI SCI 699 - DIRECTED STUDY

1-4 credits.
Directed study projects for juniors and seniors as arranged with a faculty member. Enroll Info: None
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 2020
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. Enroll Info: None
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 is 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 <br> 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 centuryand 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. Enroll Info: None
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. Enroll Info: None
Requisites: 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

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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## POLI SCI 801 - RESEARCH AND WRITING SEMINAR

3 credits.

Intended for PhD students in political science to develop a seminar or conference paper into a publishable journal article. Emphasis on editing, revising, and peer feedback. Enroll Info: None
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 2020

POLI SCI/FRENCH/GERMAN/HISTORY/SOC 804 - INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR
3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## POLI SCI 811 - INTRODUCTION TO STATISTICAL COMPUTING IN POLITICAL SCIENCE <br> 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. Enroll Info: 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 2020

## POLI SCI 812 - INTRODUCTION TO STATISTICAL METHODS IN POLITICAL SCIENCE <br> 3 credits.

Introductory statistics course for Ph.D. students. Emphasis on probability theory, inference, and the foundations of multivariate least squares and maximum likelihood. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## POLI SCI 813 - MULTIVARIABLE STATISTICAL INFERENCE FOR <br> POLITICAL RESEARCH <br> 3 credits.

Extensive treatment of multiple regression and its variants. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: POLI SCI 812 and 813
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## POLI SCI 823 - POLITICAL PSYCHOLOGY

3 credits.
The relationship between psychological processes and political thinking and behavior. Topics may include the development and functioning of mass and elite level ideology and behavior, political communication, decision-making, perception, and the impact of political experiences on psychological states and processes. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## POLI SCI 827 - INTEREST GROUPS IN AMERICAN POLITICS

3 credits.
The formation, structure, activities and power of interest groups in the United States with comparisons to interest groups in other countries. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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.). Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

POLI SCI 831 - CONCEPTS IN POLITICAL THEORY
3 credits.
Studies in normative, analytical, or historical thought about politics. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

## POLI SCI 833 - TOPICS IN ANCIENT POLITICAL THOUGHT

3 credits.
Considers varied topics in Greek, Roman, early Christian and Medieval political theory; topics in non-Western ancient and medieval thought may also be offered. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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 politica economy. Enroll Info: None
Requisites: POLI SCI/A A E 835
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## POLI SCI 839 - METHODS OF POLITICAL THEORY

3 credits.
An overview of the central disciplinary approaches to interpreting, teaching, and writing about philosophical texts. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## POLI SCI 855 - POLITICS AND CULTURE IN COMPARATIVE PERSPECTIVE <br> 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. Enroll Info: None
Requisites: 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.
A broad introduction to the field of comparative politics. It combines a theory-driven approach with a problem-driven approach to analyze key themes in comparative politics. Four paradigms in comparative politics-structural, cultural, rational-choice and institutional--will be reviewed. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## POLI SCI 863 - THE JUDICIAL PROCESS

3 credits.
Analysis of the decision-making processes of judicial institutions and the behavior of judges, litigants, lawyers, and other actors in the judicial process. Strong emphasis on the relationship between judicial and other policy-making institutions and actors. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012
POLI SCI 864 - INTERNATIONAL POLITICAL ECONOMY
3 credits.
Analysis of key classical and contemporary theories in international political economy. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2018

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Sustain - Sustainability

Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: PUB AFFR 818
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## POLI SCI 881 - AMERICAN POLITICAL DEVELOPMENT

 3 credits.Examination of critical transformations in the structure and activities of the U.S. national state; political models of economic development; periodization versus non-periodization approaches; topics include liberalism and republicanism, southern exceptionalism, labor, race, populism, war and statebuilding; construction of the corporate economy. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

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. Enroll Info: None
Requisites: 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 2020

## 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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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 904 - SEMINAR-AMERICAN POLITICS
3 credits.

In-depth examination of selected topics on American politics and governmental institutions. Enroll Info: None
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 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. Enroll Info: None
Requisites: POLI SCI 812 and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None

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 931 - SEMINAR-POLITICAL THEORY

3 credits.
Analysis of and research on problems of theorizing in and about political life. Enroll Info: None
Requisites: 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

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: POLI SCI 857
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
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. Enroll Info: None
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. Enroll Info: None
Requisites: 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

POLI SCI 949 - SEMINAR-POST COMMUNIST POLITICS
3 credits.
Comparative study of political processes in the fomer 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. Enroll Info: None Requisites: 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 959 - SEMINAR-INTERNATIONAL ORGANIZATION
3 credits.
Enroll Info: None
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 960 - SEMINAR-INTERNATIONAL RELATIONS
3 credits.

Enroll Info: None
Requisites: 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
POLI SCI 962 - SEMINAR: LATIN-AMERICAN POLITICS
3 credits.
Enroll Info: None
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. Enroll Info:
None
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/GEOG/HISTORY/LACIS/PORTUG/ SOC/SPANISH 982 - INTERDEPARTMENTAL SEMINAR IN THE LATINAMERICAN AREA
1-3 credits.
Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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/AFRICAN/ANTHRO/ECON/GEOG/HISTORY 983 INTERDEPARTMENTAL SEMINAR-AFRICAN STUDIES 3 credits.

Interdisciplinary inquiry in African society and culture. Enroll Info: None 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 986 - POLITICAL THEORY WORKSHOP

1-3 credits.
Presentation and evaluation of political theory research in progress by members of the workshop and invited speakers. Enroll Info: None 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 987 - COMPARATIVE POLITICS COLLOQUIUM

1-3 credits.
Presentation and evaluation of comparative politics research in progress by members of the workshop and invited speakers. Enroll Info: None 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 988 - INTERNATIONAL RELATIONS WORKSHOP

1-3 credits
Presentation and evaluation of International Relations research in progress by members of the workshop and invited speakers. Enroll Info: None
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 989 - AMERICAN POLITICS WORKSHOP

1-3 credits
Presentation and evaluation of American politics research in progress by members of the workshop and invited speakers. Enroll Info: None 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 990 - RESEARCH AND THESIS

1-3 credits.
Under the direction of faculty. Enroll Info: None
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

## POLI SCI 999 - INDEPENDENT WORK

2-3 credits.
Under the direction of a staff member. Enroll Info: None
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

## POPULATION HEALTH SCIENCES (POP HLTH)

POP HLTH 370 - INTRODUCTION TO PUBLIC HEALTH: LOCAL TO GLOBAL PERSPECTIVES
3 credits.

Introduces students to the principles of public health. Using local and global health problems as examples, students are introduced to epidemiology and evidence-based public health, with a focus on closing the gap between science and practice. Enroll Info: NUTR SCI 375 or a college-level, introductory science or biology crse.
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 2020

## POP HLTH/C\&E SOC/SOC 380 - CONTEMPORARY POPULATION PROBLEMS FOR HONORS <br> 3 credits.

This course is designed to identify, examine the nature and evaluate the evidence regarding key population problems affecting modern societies in the developed and developing world. The course emphasizes the development of demographic models as a tool to frame, define and investigate these problems. Examples of problems studied include: relations between population growth and environment, population growth and socioeconomic development, population and emergence of new diseases. Enroll Info: None
Requisites: Honors, and Community \& Environmental SOC/C\&E SOC 360 or equivalent or 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
Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2012

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. Enroll Info: None

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 2020
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. Enroll Info: A course in biology; Jr st
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: Jr st, a course in biology
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
POP HLTH 503 - PUBLIC HEALTH AND HUMAN RIGHTS: THE CARE OF VULNERABLE CHILDREN IN AFRICA
1 credit.
Students will understand, critique and constructively engage with global efforts to meet the needs of orphans and other children who are in highly vulnerable situations in Africa. Exploring the tensions and synergies between public health and human rights approaches, this course will prepare students for research, practice or advocacy. It is open to upper level undergraduates (junior and senior standing), graduate students, MPH students, and special students. Approved elective for the Certificate in Global Health. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## POP HLTH 504 - HEALTH CARE QUALITY IMPROVEMENT IN LOW RESOURCE SETTINGS

1 credit.

This course will present concepts of quality improvement and will trace the introduction and evolution of QI efforts in low-income countries, and among vulnerable populations worldwide. Students will get hands on training in QI methods and tools, and will explore how QI can strengthen health systems. Further, they will develop an understanding of how QI efforts can be linked to larger policy initiatives such as improved governance, task shifting within health care services, rights-based approaches to health care, and realization of the MDGs. This course will provide a useful introduction to the field of quality improvement and could be used to develop preliminary plans for quality improvement studies in a practice setting. It is open to graduate students, MPH students, and upper level undergraduate students (juniors and seniors). It is also open to special students who are enrolled in the Capstone Certificate in Global Health. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2017

## POP HLTH/NURSING 525 - NURSING LEADERSHIP FOR GLOBAL HEALTH <br> 2-3 credits

This course is designed to prepare undergraduate and graduate nursing students for leadership in global health (GH) by examining their GH goals in a course 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. Students' learning activity will be tailored to their program level (undergraduate/ graduate), their interests and the number of credits they register for. Enroll Info: Junior standing and declared in a Nursing program
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2016

## POP HLTH/ECON/PUB AFFR 548 - THE ECONOMICS OF HEALTH CARE

 3-4 creditsAnalysis of the health care industry. Markets for hospitals and physicians' care, markets for health manpower, and the role of health insurance.
Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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 twosample binomial inference, underlying assumptions and diagnostic work. Enroll Info: None
Requisites: Declared in the Population Health, Epidemiology or Clinical Investigation graduate program. Not open to students with credit for STAT/B M I 541
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: STAT/B M I 541 or POP HLTH/B M I 551
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
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 2019
POP HLTH/ENVIR ST 560 - HEALTH IMPACT ASSESSMENT OF GLOBAL ENVIRONMENTAL CHANGE
3 credits.
Covers contemporary methods of impact assessment in a framework to address global environmental health threats (e.g., global climate change, deforestation and biodiversity loss, and urban sprawl). Issues dovetail well (but do not overlap) with Introduction to Environmental Health. Enroll Info: None
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 2019
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. Enroll Info: None
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

## POP HLTH/NUTR SCI 621 - INTRODUCTION TO NUTRITIONAL EPIDEMIOLOGY <br> 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. Enroll Info: None
Requisites: STAT 301 and NUTR SCI 332, or 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/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. Enroll Info: None
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 2020
POP HLTH/M\&ENVTOX/PHM SCI/PHMCOL-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. Enroll Info: None
Requisites: PHMCOL-M/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 2020

## 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. Enroll Info: None
Requisites: (Junior standing and 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 2020

POP HLTH 640 - FOUNDATIONS IN GLOBAL HEALTH PRACTICE
1 credit.
A one-credit interdisciplinary course designed to prepare graduate students in the health sciences and related fields, as well as health professionals who are special students, for specific global health field experiences. Enroll Info: Grad or health professional stdts; Jr or Sr st, or cons inst
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Students will consider health data, health systems, historical and cultural information, and concepts of cultural competence and cultural humility. Prepares students for POP HLTH 645, Global Health Field Study. Enroll Info: Grad standing or health professional student; or consent of instructor
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 645 - GLOBAL HEALTH FIELD COURSE
1-6 credits.
A faculty-led field experience that exposes students to global health work through discussion, observational activities and participation in applied public health activities. Students will gain knowledge about health and disease, learn and practice cross-cultural skills, and explore interdisciplinary approaches to health. Enroll Info: Varies by section
Requisites: None
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014

POP HLTH 650 - SPECIAL TOPICS
1-6 credits
Variable content course. Refer to Timetable or contact department for specific list of course sections, titles, prerequisites, and instructors. Enroll Info: 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: Fall 2020

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. Enroll Info: None
Requisites: POP HLTH/B M I 552
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: 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 661 - STATE LEVEL HEALTH SYSTEM, PAYMENT, AND
COVERAGE REFORM
1 credit.
Provide and overview of the state health policy initiatives in health care coverage, access, costs, trends in public and private sectors, and current issues and debates about health care reform nationally and in Wisconsin. Enroll Info: MPH student or Grad student
Requisites: None
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2015

POP HLTH 662 - INTRODUCTION TO SOCIAL MARKETING IN PUBLIC HEALTH
1 credit.
The course teaches students about social marketing and applications that apply to public health. It combines didactic presentations with group discussions and in-class exercises. Students are expected to read all assigned materials and complete a group assignment for oral and written presentation. After completion, students will be able to define social marketing, identify appropriate uses of social marketing, apply a model for developing, implementing and evaluating a social marketing campaign. Enroll Info: None
Requisites: Declared in Master of Public Health program or graduate standing only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## POP HLTH 664 - PREVENTION OF OVERWEIGHT AND OBESITY

2 credits.
This course is intended to provide students with theoretical and practical knowledge to develop, implement, and evaluate obesity prevention interventions. This course will emphasize pediatric obesity prevention with a focus on nutrition and physical activity health behaviors and environments. Enroll Info: None
Requisites: Declared in Master of Public Health program or graduate standing only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 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 Prev Med staff. Enroll Info: None
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 2020
POP HLTH/I SY E 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. Enroll Info: None
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. Enroll Info: None
Requisites: SOC/POP HLTH 797 and STAT/B M I 542
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## POP HLTH 709 - TRANSLATIONAL AND OUTCOMES RESEARCH IN HEALTH AND HEALTH CARE <br> 3 credits.

This course 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## POP HLTH 711 - INTRODUCTION TO LIFE COURSE EPIDEMIOLOGY AND FAMILY HEALTH SERVICES RESEARCH <br> 3 credits.

This course will deepen our understanding of how health is produced over the life course. A life course approach focuses on how early life experiences influence health across lives and possibly generations. This includes the concept of "linked lives" or how health is produced in the context of familial and social relationships. Using a life course and human development framework, we will explore a number of concepts explaining how exposures in early life lead to health outcomes at later life stages. Namely, we will examine critical or sensitive periods (i.e., "Barker hypothesis" or "fetal or biological programming"), cumulative effects, pathways and trajectories, risk and resilience, and intergenerational impacts (transmission of health across one or more generations). Through this lens, we will consider the biobehavioral processes that underlie the development of health across the life course. Together this theoretical and empirical evidence will be applied to the understanding of the evolution and persistence of health disparities. Data sources, study designs, and statistical approaches used in life course epidemiology and family health services research will also be reviewed and evaluated. Finally, we will explore implications for clinical and public health practice, policy, and health system development with an eye towards the development of effective and sustainable life course interventions. We will conclude the course with an in-depth examination of three case-studies that will allow the students to apply their knowledge to specific life course and family health services research examples. The purpose of this course is to provide students with a foundation for understanding: 1) the terminology and theoretical framework used in life course epidemiology and family health services research; 2) biobehavioral pathways by which early life experiences impact health across the life course; 3) the data sources, study designs, and statistical approaches used in life course epidemiology and family health services research; 4) the implications for clinical and public health practice, policy, and health system development with an eye towards the development of effective and sustainable life course interventions. Enroll Info: Graduate standing and either POP HLTH 795 or POP HLTH/SOC 797; or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## POP HLTH 712 - INTEGRATING MEDICINE AND PUBLIC HEALTH

1 credit.
The purpose of this elective is to provide 1 st and 2 nd year medical students and physician assistant students with 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## POP HLTH 713 - EPIDEMIOLOGY OF HIV/AIDS

1 credit.
This course 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. Enroll Info: PHS 797 Introduction to Epidemiology or permission from the instructor

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2019

POP HLTH 714 - LEADERSHIP FOR POPULATION HEALTH
IMPROVEMENT
3 credits.
This course is designed to deepen participants' understanding of their own leadership attributes and style, refine core leadership skills including communication, collaboration, negotiation, and advocacy, and build a framework for advancing population health improvement within and across organizations. Enroll Info: Students must be in the Leadership in Population Health Improvement on-line Certificate and must have taken PHS 780, PHS 785, and PHS 879
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
POP HLTH 715 - INTRODUCTION TO COMMUNITY ENGAGEMENT
1 credit.

The course will provide students with introductory knowledge and skills needed for appropriate community engagement to address community health issues. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## POP HLTH 717 - PRINCIPLES OF POPULATION MEDICINE AND EPIDEMIOLOGY <br> 3 credits

Focuses on the basic science of public health and population medicine. Students learn about epidemiologic methods to understand the causes of disease, and evidence-based approaches for disease prevention, early detection and treatment, at the individual and community level. Enroll Info: 1st yr Med st
Requisites: Declared in Doctor of Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Fall 2015

## 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. Enroll Info: None
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. Conspiracies in Public Health will prepare health professions students to educate communities about important public health and medical interventions. Enroll Info: None

Requisites: Professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Students will 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
POP HLTH 781 - PUBLIC HEALTH SEMINAR
1 credit.
Students will explore current public health issues, problems, and solutions while advancing their communication, facilitation, and leadership skills. Enroll Info: None
Requisites: POP HLTH 788
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

POP HLTH 785 - HEALTH SYSTEMS, MANAGEMENT, AND POLICY 3 credits.

This course is designed to introduce students to the fundamental characteristics of health care systems. Enroll Info: Health prof st or grad st; or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
POP HLTH 786 - SOCIAL AND BEHAVIORAL SCIENCES FOR PUBLIC
HEALTH
3 credits.
Students analyze public health issues from a social and behavioral sciences perspective, and critically examine the strengths and weaknesses of particular theories for developing effective population and community-based intervention programs. Enroll Info: Grad or health professional student; or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

## POP HLTH/M\&ENVTOX 789 - PRINCIPLES OF ENVIRONMENTAL HEALTH: A SYSTEMS THINKING APPROACH <br> 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 decisionmaking and management form a public health practice perspective will be discussed. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## POP HLTH 790 - THE PHYSICIAN IN PUBLIC HEALTH AND PUBLIC HEALTH IN THE PHYSICIAN <br> 2 credits.

This 2-credit elective course, designed exclusively for MD-MPH dual degree students, will provide an opportunity for students to continue or enhance work on the continuum of the MPH fieldwork and/or capstone project during Phase III of medical school through a one-month selfdirected learning experience. This elective will be planned well in advance, and the month-long elective will be devoted entirely to a public healthrelated project that has been approved by the MD-MPH Director. Enroll Info: None
Requisites: Declared in the dual MD-MPH degree program
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## POP HLTH 794 - BIOLOGICAL BASIS OF POPULATION HEALTH

 2 credits.This course covers the physiology, biology and biochemistry of selected disease processes deemed to be important to students of population health sciences by virtue of their clinical significance including incidence, mortality and morbidity. Enroll Info: Pop Hlth Grad st or MPH stdt; or cons inst
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.Introduces students to the 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. The three credit version of this course is intended for graduate students in the Population Health Sciences and other departments. The one credit version is required for MPH students. Enroll Info: Declared in Population Health or Master of Public Health program
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: POP HLTH 795; or cons inst

Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
POP HLTH/SOC 797 - INTRODUCTION TO EPIDEMIOLOGY
3 credits.
Lectures and discussions on design, implementation and interpretation of epidemiologic studies; emphasis on methodologic problems in the measurement of disease frequency, natural history and risk factors. Enroll Info: Grad st or healthcare professional program st or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: POP HLTH/SOC 797; or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: POP HLTH/SOC 797; or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## POP HLTH 802 - ADVANCED EPIDEMIOLOGY: ETIOLOGY AND PREVENTION

3 credits.
The course addresses the epidemiological basis for understanding the etiology and prevention of major diseases. Students integrate information about disease patterns, epidemiological methods, and published studies to identify research questions and design a project. Enroll Info: Grad st, POP HLTH/SOC 797 798; or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## POP HLTH 805 - ADVANCED EPIDEMIOLOGY: CAUSAL INFERENCE IN EPIDEMIOLOGICAL STUDIES <br> 3 credits.

The focus of the course is 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). Enroll Info: None
Requisites: 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 2020

## POP HLTH 806 - ADVANCED EPIDEMIOLOGY: PRACTICE OF EPIDEMIOLOGY <br> 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. Enroll Info: None
Requisites: 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 2020

## 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. Enroll Info: None
Requisites: 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 students with 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. Exposes students 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 help students identify ways that epidemiology can contribute to improvements in global health. Enroll Info: None
Requisites: Graduate/professional standing or declared in Global Health, Capstone Certificate
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## POP HLTH 820 - GRADUATE RESEARCH SEMINAR

1 credit.
Research seminar for students in the population health graduate program. 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. Enroll Info: Grad st in population health grad progm
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

## POP HLTH 845 - SEMINAR IN HEALTH AND MENTAL HEALTH ECONOMICS <br> 1-3 credits.

This doctoral seminar provides an overview of current topics in health and mental health economics. The main objectives of this semina is to acquaint students with important current topics, literature, and scholarship in this field. Enroll Info: Students who are predoctoral trainees in the NIMH Training Program are expected to take this seminar all semesters it is offered. For other graduate students studying health economics, enrollment is by consent of instructor (to manage seminar size). Graduate-level study in microeconomics and econometrics is expected for any student enrolled in or auditing the 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: Fall 2016

## POP HLTH 847 - CARDIOVASCULAR EPIDEMIOLOGY

1 credit.

For graduate students interested in the epidemiology of cardiovascular diseases. The main emphasis is the discussion of the population distribution, health impact, risk factors, treatment, and prevention of cardiovascular diseases. Enroll Info: None

Requisites: SOC/POP HLTH 797
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None

Requisites: SOC/POP HLTH 797 and POP HLTH/B M I 552
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

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. Enroll Info: Grad stdt in population health Prev Med 795, 797 800; or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing and (PUB AFFR 818 and 880), or 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 2020
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. Enroll Info: Varies by section
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. Enroll Info: Grad or health professional st (not M1-M3 st)
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

POP HLTH 917 - GENERAL PREVENTIVE MEDICINE AND PUBLIC HEALTH ELECTIVE
4 credits.
The 4th year public health elective will introduce the student to the role of physicians working in various fields of public health. Students can work with faculty from the Department of Population Health Sciences, Wisconsin Division of Public Health or Wisconsin State Laboratory of Hygiene on a public health or health policy project. The student will have the opportunity to select a health issue in Wisconsin, conduct a literature review, analyze relevant data, interpret the results, and write a report. Enroll Info: None
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 2018

POP HLTH/KINES 955 - SEMINAR - PHYSICAL ACTIVITY EPIDEMIOLOGY
1 credit.
Current research developments in physical activity epidemiology. Enroll Info: None

Requisites: 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

POP HLTH 990 - RESEARCH
1-8 credits

Cons inst. Enroll Info: None
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

## PORTUGUESE (SPANISH AND PORTUGUESE) (PORTUG)

## PORTUG 101 - FIRST SEMESTER PORTUGUESE

4 credits.
Grammar, conversation, and reading. Enroll Info: None
Requisites: None
Course Designation: Frgn Lang - 1 st 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

PORTUG 102 - SECOND SEMESTER PORTUGUESE
4 credits.

Continuation of 101. Enroll Info: Portuguese 101. Open to Fr Requisites: None
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
PORTUG 201 - THIRD SEMESTER PORTUGUESE
4 credits.

Enroll Info: Portuguese 102. Open to Fr
Requisites: None
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

PORTUG 202 - FOURTH SEMESTER PORTUGUESE
4 credits
Continuation of 201. Enroll Info: Portuguese 201. Open to Fr
Requisites: None
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
PORTUG 207 - PORTUGUESE FOR BUSINESS
4 credits.

A second year Portuguese language course focusing on needs specific to business. Enroll Info: Portuguese 101/102 or 301 or cons inst. Open to Fr
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 2015
PORTUG 221 - INTRODUCTION TO LUSO-BRAZILIAN LITERATURES
4 credits.
Reading, discussion, literary history. Sixteenth, nineteenth and twentieth centuries. Enroll Info: Portuguese 202 or cons inst
Requisites: None
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 2020
PORTUG 225 - THIRD YEAR CONVERSATION AND COMPOSITION 3 credits.

Enroll Info: Portuguese 202
Requisites: None
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 2020

PORTUG 226 - THIRD YEAR CONVERSATION AND COMPOSITION
3 credits
Enroll Info: Portuguese 225
Requisites: None
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 2018

PORTUG 299 - DIRECTED STUDY
1-3 credits
Enroll Info: None
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.

Enroll Info: None
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 2020

PORTUG 302 - INTENSIVE PORTUGUESE
4 credits.

Enroll Info: Portuguese 301
Requisites: None
Course Designation: Frgn Lang - 4th 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 requiremen
Repeatable for Credit: No
Last Taught: Summer 2020

PORTUG 311 - FOURTH YEAR COMPOSITION AND CONVERSATION
3 credits.

Advanced oral practice and writing. Enroll Info: None
Requisites: None
Course Designation: 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 2020
PORTUG 312 - FOURTH YEAR COMPOSITION AND CONVERSATION
3 credits

Continuation of 31 . Enroll Info: Portuguese 311
Requisites: None
Course Designation: 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: Spring 2020

PORTUG 330 - HISTORY OF THE PORTUGUESE LANGUAGE 3 credits.

An 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. Enroll Info: Portuguese 311 or cons inst
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: Spring 2020
PORTUG 361 - PORTUGUESE CIVILIZATION
3 credits.

Lecture, readings and class discussion. Enroll Info: None
Requisites: None
Course Designation: Gen Ed - Communication Part B
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
PORTUG 362 - BRAZILIAN CIVILIZATION
3 credits.

Continuation of 361 . Enroll Info: Portuguese 225/226 or cons inst
Requisites: None
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 2018
PORTUG 364 - HISTORICAL AND CULTURAL TRADITIONS OF BRAZIL
2 credits.

Enroll Info: Portuguese 363 or cons inst
Requisites: None
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

PORTUG 411 - SURVEY OF PORTUGUESE LITERATURE BEFORE 1825 3 credits

Advanced survey of Portuguese literature from 1140 to 1825. Enroll Info:
Portuguese $221311 / 312$ or cons inst
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
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. Enroll Info:
Portuguese 221 311/312 or cons inst
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
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. Enroll Info: None
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 2020
PORTUG/GEN\&WS 450 - BRAZILLIAN WOMEN WRITERS 3 credits.

A survey of representative writing by contemporary Brazillian women writers in relation to representations of nationality, race, class, ethnicity, gender and sexualities. Enroll Info: None
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: Fall 2020

PORTUG/AFRICAN 451 - LUSOPHONE AFRICAN LITERATURE 3 credits.

Chronological and thematic survey of major trends, authors, and works of Lusophone Africa since 1936. Enroll Info: Portuguese 221 311/312 or cons inst
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
Grad 50\%-Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
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. Enroll Info: None 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
PORTUG 467 - SURVEY OF PORTUGUESE LITERATURE SINCE 1825
3 credits.
Advanced survey of Portuguese literature since 1825. Enroll Info:
Portuguese 221 311/312 or cons inst
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
Grad 50\%-Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
PORTUG 468 - SURVEY OF BRAZILIAN LITERATURE SINCE 1890
3 credits.
Advanced survey of Brazilian literature since 1890. Enroll Info:
Portuguese 221 311/312 or cons inst
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
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 Study Abroad Program which has no equivalent on this campus. Enroll Info: None
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: Fall 2001

PORTUG 640 - TOPICS IN LUSO-BRAZILIAN LITERATURE
3 credits.
Enroll Info: Portuguese 221 311/312 or cons inst
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: Fall 2015
PORTUG 642 - TOPICS IN LUSO-BRAZILIAN CULTURE
3 credits.
Examines a variety of cultural topics in relation to Portuguese-speaking countries. Enroll Info: PORTUG 311 or cons inst
Requisites: None
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
PORTUG 681 - SENIOR HONORS THESIS
3 credits.

Enroll Info: None
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
PORTUG 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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

## PORTUG 699 - DIRECTED STUDY

1-6 credits.
Enroll Info: Sr st. Graded on a lettered basis; requires cons inst
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 2020
PORTUG 751 - SEMINAR: BRAZILIAN LITERATURE
3 credits.
Enroll Info: None
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.
Enroll Info: None
Requisites: 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/FRENCH/ITALIAN/SPANISH 817 - ROMANCE PHILOLOGY 3 credits.

Seminar focusing on linguistic and philological analyses of the textual record in (Hispano-)Romance. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## PORTUG 899 - INDEPENDENT READING

1-3 credits.
Enroll Info: None
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
PORTUG/A A E/ANTHRO/C\&E SOC/GEOG/HISTORY/LACIS/POLI SCI/ SOC/SPANISH 982 - INTERDEPARTMENTAL SEMINAR IN THE LATINAMERICAN AREA
1-3 credits.
Interdisciplinary inquiry in Latin American society and culture. Enroll Info: None
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

PORTUG 990 - THESIS
1-12 credits.
Credit commensurate with work accomplished. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## PSYCHIAT 713 - SEMINAR IN REFLECTIVE PRACTICES AND MINDFULNESS IN INFANT, EARLY CHILDHOOD \& FAMILY MENTAL HEALTH I <br> 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 parentinfant/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 invivo 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## PSYCHIAT 716 - SEMINAR IN REFLECTIVE PRACTICES AND MINDFULNESS IN INFANT, EARLY CHILDHOOD AND FAM MENTAL HEALTH II <br> 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. Enroll Info: None 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 2020

## PSYCHIAT 717 - CONSULTATION IN INFANT, EARLY CHILDHOOD AND FAMILY MENTAL HEALTH: ADVANCED CLINICAL PRACTICE II <br> 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PSYCHIAT 910 - PSYCHIATRY INDEPENDENT READING AND RESEARCH ELECTIVE <br> 1-12 credits

Independent exposure to research methodology as it pertains to psychiatry and/or affective neuroscience. Enroll Info: None
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

## PSYCHIAT 919 - PSYCHIATRY INDIVIDUALIZED CLINICAL ELECTIVE

1-12 credits.

Develop a customized experience with relevant faculty not offered by our already established electives. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: 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

## PSYCHIAT 922 - PSYCHIATRY CONSULTATION AND LIAISON CLINICAL ELECTIVE <br> 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. Enroll Info: None
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

## 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). Enroll Info: None
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 2019

## 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. Enroll Info: None
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

## PSYCHIAT 932 - PSYCHIATRY ADDICTION CLINICAL ELECTIVE

1-12 credits.
Etiology, assessment, and treatment of substance use disorders and psychiatric co-morbidity. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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 creditsIntroduction 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. Enroll Info: None
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

## PSYCHIAT 946 - CHILD AND ADOLESCENT PSYCHIATRY CLINICAL ELECTIVE <br> 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, for 3 number of completions

## 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. Enroll Info: None
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
PSYCH/SOC 160 - HUMAN SEXUALITY: SOCIAL AND PSYCHOLOGICAL ISSUES
3-4 credits.

Biological, psychological and sociological aspects of sexual relationships and behavior. The course 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. Enroll Info: Not open to students who have taken Soc/Psych 350
Requisites: Not open to students who have taken SOC/PSYCH 453 (or 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: Fall 2020

## PSYCH 202 - INTRODUCTION TO PSYCHOLOGY

3-4 credits
Behavior, including its development, motivation, frustrations, emotion, intelligence, learning, forgetting, personality, language, thinking, and social behavior. Enroll Info: None

Requisites: Not open to students who have taken PSYCH 201 or PSYCH 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: Fall 2020
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. Enroll Info: None 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 2020
PSYCH 210 - BASIC STATISTICS FOR PSYCHOLOGY
3 credits.

Measures of central tendency, variability; probability, sampling distributions; hypothesis testing, confidence intervals; t-tests; Chisquare; regression and correlation (linear) and introduction to analysis of variance (1-way). Enroll Info: Satisfied Quantitative Reasoning (QR) A requirement; PSYCH 201 or 202 or 281 or concurrent enrollment Requisites: Satisfied Quantitative Reasoning (QR) A requirement and PSYCH 201, 202, or 281 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: Fall 2020

## PSYCH 211 - FRESHMAN SEMINAR IN PSYCHOLOGY

3 credits.
The course will introduce students to research methods, theories, findings and current controversies in a focused area of psychology. See Timetable for topics. Enroll Info: None
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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. May be repeated.
Enroll Info: PSYCH 201, 202, or 281
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: Fall 2020

PSYCH 325 - EXPERIMENTAL PSYCHOLOGY FOR GRADUATE STUDENTS
4 credits.
Experimental research techniques and methodology as applied to various areas of psychology; lectures, lab experiments. Grad level of 225. Enroll Info: Grad level of PSYCH 225.

Requisites: Graduate Students 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 2014

## 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. Enroll Info: None
Requisites: (MATH/STAT 309, STAT 311, 324, 371, PSYCH 210, C\&E SOC
360, GEN BUS 303, 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: Fall 2020

## 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. Enroll Info: None
Requisites: PSYCH 225 and declared in College of Letters and Science Honors in the Liberal Arts or Psychology Honors in the Major Course Designation: 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 2020

PSYCH 386 - TOPICS IN PSYCHOLOGY FOR HONORS STUDENTS
1 credit.
Current topics for honors students in psychology. Faculty will lead ecture/discussions about a wide range of topics such as child development, clinical psychology, perception, physiological psychology, and human learning. Enroll Info: 6 cr in psych, incl Psych 201/202 and So st or cons inst
Requisites: Declared in honors program
Course Designation: Level - Intermediate
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
PSYCH 399 - SERVICE LEARNING IN PSYCHOLOGY
1-4 credits.

An independent opportunity to provide experience in community service work relevant to psychology. Enroll Info: None
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 2020

## 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. The course will address the ways that society defines membership, and the role of psychology in how it determines who should be excluded or restricted from open society, in order to maintain a more civil society. In addition to learning the factual information about how selected processes work in the legal and social context, students will be asked to consider the role they can play as citizens in supporting or changing these social processes. The course will take a particular interest in psycholegal issues "in action" and in learning about the clinical-legal processes used to determine the disposition of individuals considered marginal in society. Finally, the course will address the mechanisms that are 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. Enroll Info: None
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 2020
PSYCH 403 - PSYCHOLOGY OF PERSONALITY
3 credits.
Organization and development of the personality. Enroll Info: PSYCH 201, 202, or 281
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 2019
PSYCH 405 - ABNORMAL PSYCHOLOGY
3-4 credits.
A survey course of psychopathology. In this breadth course, we will discuss the diagnosis and treatment of the major mental disorders. We will also consider the 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. Enroll Info: PSYCH 201, 202, or 281
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 2020

## 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. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), 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 2019
PSYCH 408 - PSYCHOLOGY OF HUMAN EMOTIONS
3 credits.
Influence of emotions on goals, customs, interests, learning, reasoning, and behavior problems in children and adults. Enroll Info: 12 cr of psych

## 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: Fall 2011

## 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. Enroll Info: None
Requisites: Consent of instructor
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
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. Enroll Info: None
Requisites: PSYCH 201, 202, 281, LINGUIS 101, or LINGUIS/ANTHRO 301
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 2018

## 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. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), ZOOLOGY/
BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)
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 2020
PSYCH 428 - INTRODUCTION TO CULTURAL PSYCHOLOGY
3-4 credits.
Cultural underpinning of psychological processes. The course will cover 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. Enroll Info: PSYCH 201, 202, or 281
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 2019

## PSYCH 430 - HISTORY OF PSYCHOLOGY

3 credits.
Theoretical and systematic psychology as represented by British empiricism, structuralism, functionalism, dynamic psychology, behaviorism, gestalt psychology, and psychoanalysis; implications for current trends in theory and systems. Enroll Info: PSYCH 225 or cons inst Requisites: PSYCH 225 or PSYCH 285
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 2011

## PSYCH 449 - ANIMAL BEHAVIOR

3-4 credits.
Evolutionary and physiological mechanisms of animal behavior including aggressive, reproductive, communicative, and social behaviors, behavioral development. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), 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: Fall 2020

## 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. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), 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 2020

## PSYCH/SOC 453 - HUMAN SEXUALITY

4 credits.
Provides an interdisciplinary introduction to biological, psychological, and sociological aspects of human sexuality. Enroll Info: None
Requisites: Sophomore standing; not open to students who have taken
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 2020

## 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. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), 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 2020

## PSYCH 455 - LABORATORY IN BEHAVIORAL NEUROSCIENCE

1 credit.
Introduction to research techniques and experimental methods of physiological psychology. Emphasis on the surgical, histological and electrophysiological techniques for studying the neural mechanisms of behavior. Enroll Info: Psych 201 or 202 or 281; Zoo 101/102 or Zoo/Bot 151/152 or Biocore 301; con reg in PSYCH 454
Requisites: Concurrent enrollment required in PSYCH 454 and PSYCH 455
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 2013

## PSYCH/SOC 456 - INTRODUCTORY SOCIAL PSYCHOLOGY

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. Enroll Info: None
Requisites: Sophomore standing and C\&E SOC 140, 210, 211, SOC 181,
PSYCH 201, 202, 281 or ANTHRO 100
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 2020
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.
Enroll Info: PSYCH 201, 202, or 281
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 2020
PSYCH 464 - ADULT DEVELOPMENT AND AGING
3 credits.
Physical, cognitive, social, and personality development during the adult years. Enroll Info: PSYCH 201, 202, or 281
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 2020
PSYCH 501 - DEPTH TOPIC IN SOCIAL SCIENCE
4 credits.
Provides an in-depth treatment of a specific topic in psychology. Enroll Info: None
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: Fall 2017

## 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. Enroll Info: None
Requisites: (PSYCH 201, 202, or 281) and (PSYCH 406, 413, 414, or 460; 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: Spring 2020

## 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. Enroll Info: PSYCH 414, 449, 450, 528,530 or 560
Requisites: Students must have completed Intro Psych; and must have completed PSYCH 414, 428, 449, 450, 460, or SOC/PSYCH 456 (or SOC 530 or PSYCH 560 prior to Fall 2017); must be a declared Psych major. Students may NOT have taken Psych 411.
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 504 - AFFECTIVE NEUROSCIENCE

4 credits.
Focuses on the neural basis of emotion, including how the brain analyzes incoming sensory information, categorizes its motivational value, and initiates an ecologically appropriate response. Enroll Info: None
Requisites: PSYCH 202 and PSYCH 406, 413, 414, 454, or SOC/
PSYCH 456 (or SOC 530 prior to Fall 2017)
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 2014
PSYCH 505 - DEPTH TOPIC IN BIOLOGICAL SCIENCE
3-4 credits.
Provides an in-depth treatment of a specific topic in psychology and biology. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), 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

 CULTURE4 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 indepth 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. Enroll Info: None
Requisites: PSYCH 403, 428, 460, or SOC/PSYCH 453 or 456, or 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 2020

## 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? Enroll Info: None
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 2020

## 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. Enroll Info: Psych 201 or 202 or 281. Those who take 511 may not receive credit for 509

Requisites: Students who have PSYCH 405 (or PSYCH 509 prior to Fall 2017) may not take PSYCH 511

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 512 - BEHAVIOR PATHOLOGY-PSYCHOSES

3 credits.
The nature, origins, assessment and treatment of psychotic and organic behavioral abnormalities; emphasis on the experimental analysis of Psychopathology. Enroll Info: Psych 201 or 202 or 281509 or 511
Requisites: PSYCH 202 and (PSYCH 405 or 511 (or 509 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 2014

## PSYCH 513 - HORMONES, BRAIN, AND BEHAVIOR

4 credits.
Complex social behavior emerges from the interplay of hormones, the brain and environmental signals. This course is structured to introduce psychology and neurobiology students to how hormones and neurotransmitters shape brain and behavior in animals and humans. We will review the mechanisms by which hormones shape brain sex differences and its consequences on juvenile (i.e. play) and adult behavior. We will discuss 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. We will also discuss how individual variation occurs in response to the changing environment and genetic landscape, including epigenetics at an introductory level. Enroll Info: None
Requisites: PSYCH 202, (ZOOLOGY/BIOLOGY 101 and 102), ZOOLOGY/
BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)
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 2020

## 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? Enroll Info: None
Requisites: (PSYCH 201, PSYCH 202, or PSYCH 281) and (PSYCH 406, PSYCH 413, PSYCH 414, or PSYCH 460 (old 560 ); not open to students who have taken PSYCH 402
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 <br> 4 credits.

This class will take you on a tour of how humans conceptualize the world, focusing on the role of language in thought. We will begin by discussing the evolution of language and how it relates to other communication systems used by humans and nonhuman animals. We will then discuss the relationship between language, culture, and cognition in domains as varied as mathematics, visual perception, spatial navigation, and theory of mind. In the process, we will tackle questions such as: What is the role of language in making us human? Can speaking a particular language allow the speakers to better adapt to their environment? Can we create new languages to improve human thought? We will also address such issues as metaphors in political discourse and propaganda, and the role of information technologies in the spread of ideas. This class will draw heavily on empirical research in cognitive and developmental psychology as well as neuroscience. Enroll Info: Psych 201 or PSYCH 202 or Psych 281; and Psych 402 or PSYCH 413 or PSYCH 414 or Psych 560
Requisites: (PSYCH 201, 202, or 281 ) and (PSYCH 406, 413, 414, or 460; or 560 prior to Fall 2017)
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
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; genderbased violence; female achievement and power; lifestyle choices of women; women and mental health; and psychological research with transgender individuals. Enroll Info: None
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: Fall 2019

## 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 151, 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 2020

## 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. Enroll Info: 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 2019

## 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. Enroll Info: PSYCH 507, PSYCH 405 (old 509),
PSYCH 511, PSYCH 512, or SOC/PSYCH 456 (old 530)
Requisites: PSYCH 403 (507 prior to spring 2018), PSYCH 405 (509 prior
to fall 2017), or SOC/PSYCH 456 (530 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 2020
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. In this course, students will examine empirical evidence for whether the Internet is changing the way we learn, communicate, socialize, attend, develop, and age. Students will read and synthesize original research literature, which will be augmented with readings and videos from the popular press. Enroll Info: PSYCH 201,

## 202 or 281

Requisites: PSYCH 202 (or 201 or 281 prior to Spring 2018)
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 2020

## 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. Enroll Info: None
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 2020
PSYCH/ZOOLOGY 550 - ANIMAL COMMUNICATION AND THE ORIGINS OF LANGUAGE
3 credits.

Signals, contexts, and mechanism of social communication in animals. Speech and non-verbal communication in human beings and possible arguments for the evolution of speech and language. Enroll Info:
PSYCH 449 or 450 or Zoology 531 or 532
Requisites: PSYCH 225 or PSYCH 285
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 2012

## 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. Enroll Info: None
Requisites: PSYCH 225 or PSYCH 285
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 2020

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. Enroll Info: None
Requisites: PSYCH 210, 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. Enroll Info: None
Requisites: (PSYCH 454 or 523) and PSYCH 225, BOTANY/BIOLOGY/ ZOOLOGY 152, 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 2020
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. Enroll Info: None
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 CLINICAL PSYCHOLOGY

3 credits.

Methods, rationale, and empirical foundations of clinical psychology.
Enroll Info: None
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: Fall 2017

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: NEURODEPT 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 2020

## 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. Enroll Info: None
Requisites: (PSYCH 454 or 523) and PSYCH 225, BOTANY/BIOLOGY/ ZOOLOGY 152, 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

## 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. Enroll Info: Jr st; college level elem crse in biology or psych
Requisites: Junior standing; not open to special students
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.
In this course, students will develop an understanding of primary research in a topic area and will 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, and evaluation will include presentations in group meetings and or a paper based on the research conducted. Enroll Info:

## None

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 <br> 1-6 credits.

In this course, students will develop an understanding of primary research in a topic area and will 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, and evaluation will include presentations in group meetings and or a paper based on the research conducted. Enroll Info:

## None

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

## PSYCH/I SY E 652 - SOCIOTECHNICAL SYSTEMS

3 credits.
Sociotechnical systems theory with applications to the design of organizations and jobs. Open systems and organizational environments. Analysis of the technical and social systems and techniques for "whole" system consideration. Organizational design strategy. Field site analyses by student teams. Enroll Info: None
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 2011

## 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. Enroll Info: None
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 2020

## PSYCH/NEURODPT/ZOOLOGY 674 - BEHAVIORAL NEUROENDOCRINOLOGY SEMINAR <br> 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101, 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 2019
PSYCH 681 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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
PSYCH 682 - SENIOR HONORS THESIS
3 credits.
Enroll Info: None
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 2020
PSYCH 686 - HONORS SEMINAR IN PSYCHOLOGY
1 credit.
Enroll Info: None
Requisites: Concurrent enrollment in PSYCH 681 or 682
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 2020

## PSYCH 691 - UNDERGRADUATE THESIS

1-6 credits.
Undergraduate research including completion of a thesis. Recommended for those intending to do graduate work in psychology. Enroll Info: None 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

## PSYCH 692 - UNDERGRADUATE THESIS

1-6 credits.
Continuation of 691. Enroll Info: None
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
PSYCH 693 - ANIMAL BEHAVIOR PROBLEMS
1-12 credits.
Repeatable to a maximum of 12 credits. Individual experimental studies. Enroll Info: None
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 694 - PROBLEMS IN DEVELOPMENTAL PSYCHOLOGY 1-12 credits.

Repeatable to a maximum of 12 credits. Independent problems under supervision. Enroll Info: Cons inst Psych 560 /or 561
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: Summer 2014
PSYCH 695 - PROBLEMS IN CLINICAL PSYCHOLOGY
1-12 credits.
Repeatable to a maximum of 12 credits. Individual experimental studies. Enroll Info: None
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.
Repeatable to a maximum of 12 credits. Independent work under supervision. Enroll Info: None
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.
Enroll Info: Jr or Sr st, and cons inst
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 2020
PSYCH 701 - PROSEMINAR IN EXPERIMENTAL PSYCHOLOGY 1 credit.

Introductions to various aspects of experimental psychology such as sensory, learning, motivation, and experimental methodology. Enroll Info: None
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 703 - PROSEMINAR IN SOCIAL PSYCHOLOGY
1 credit.
Weekly 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. Enroll Info: Admission to grad prog in soc psych. Others with cons soc psych area group chair. Req of all grads in soc psych
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 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. Six semesters of this course are required for all clinical graduate students. Enroll Info: Admission to Grad prgm in clinical psych
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 706 - PROSEMINAR IN DEVELOPMENTAL PSYCHOLOGY

 1 credit.Weekly 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. Enroll Info: Grad st in psych or related field, or cons inst
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 707 - PROSEMINAR IN BIOLOGICAL PSYCHOLOGY (PERCEPTION/BIOLOGY OF BRAIN \& BEHAVIOR) <br> 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PSYCH 711 - CURRENT TOPICS IN PSYCHOLOGY

2-3 credits

## Enroll Info: None

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 715 - LANGUAGE AND COGNITIVE DEVELOPMENT 3 credits.

The development of language and cognition with an emphasis on the review of research and theory. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2014

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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## PSYCH 733 - PERCEPTUAL AND COGNITIVE SCIENCES

2 credits.
Lectures on current approaches to perceptual and cognitive sciences. Enroll Info: None
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.

Lectures on current approaches to assessment, etiology, and treatment of topic material. Enroll Info: None
Requisites: 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

PSYCH 741 - CLINICAL II: ASSESSMENT, ETIOLOGY, AND TREATMENT 1 credit.

Lectures on current approaches to assessment, etiology and treatment of topic material. Enroll Info: None
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
PSYCH 752 - APPLIED MACHINE LEARNING FOR BEHAVIORAL DATA
SCIENCE
3 credits.
Introduction to computational approaches in machine learning for the behavioral sciences. Enroll Info: None
Requisites: PSYCH 610 and graduate/professional standing
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 $(\mathrm{HCl})$; human subjects research methods and procedures, qualitative and quantitative data analysis; and semester-long research project situated in critical domains of HCl , including applications in ubiquitous, affective, assistive, social, and embodied computing. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
PSYCH 776 - TEACHING OF PSYCHOLOGY
1-3 credits

Enroll Info: None
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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
PSYCH 799 - INDEPENDENT READING
2-3 credits.

Enroll Info: None
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. Enroll Info:
None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

PSYCH 802 - ASSESSMENT OF PSYCHOPATHOLOGY \& PERSONALITY 2 credits.

This course will introduce 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). Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PSYCH 805 - FIELD WORK IN CLINICAL PSYCHOLOGY

1-3 credits.

Supervised field work in practical clinical situations. Enroll Info: None 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 806 - PRINCIPLES OF PSYCHOTHERAPY RESEARCH
2 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PSYCH 808 - CULTURE \& DIVERSITY IN CLINICAL PRACTICE I

 2 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. This course aims to build multicultural competencies by increasing students' 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 throughout the course via video examples of expert therapists. Culture Diversity I focuses on introducing the concepts of multicultural counseling and assessment, and more specifically on the diversity characteristics of race, ethnicity, and sexual orientation. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
PSYCH 809 - ETHICAL AND LEGAL ISSUES IN CLINICAL PRACTICE I 2 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## PSYCH 810 - CLINICAL SUPERVISION, CONSULTATION, \& COMMUNITY PSYCHOLOGYI <br> 2 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## PSYCH 811 - COGNITIVE BEHAVIOR THERAPY

1 credit.
This course examines the theory and practice of Cognitive-Behavior Therapy (CBT). Students will examine the core issues of CBT from both theoretical and applied perspectives through case conceptualization exercises, role-plays, and application of CBT exercises to themselves. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PSYCH 812 - CULTURE \& DIVERSITY IN CLINICAL PRACTICE II

2 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 throughout the course via video examples of expert therapists. Focuses on the diversity characteristics of sexual identity, social class, age, and disability status. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## PSYCH 813 - ETHICAL AND LEGAL ISSUES IN CLINICAL PRACTICE II

 2 credits.Advanced discussion of a clinical psychologist's ethical and legal obligations. 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 PRTC group case discussions. Also acts as a forum to discuss ethical and legal issues pertinent to ongoing clinical cases. Topics also include a more in-depth examination of the ethical and legal responsibilities of psychotherapists; ethics in academic settings; liability and duties when supervising trainees; appropriate collegial and client relationships; forensic psychology; and the business of mental health including ethical marketing practices. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

PSYCH 814 - CLINICAL SUPERVISION, CONSULTATION, \& COMMUNITY PSYCHOLOGY II
2 credits.
Advanced exploration of supervision and consultation that builds on supervisory skills. A highly experiential course; requires active engagement in the provision of psychotherapy services. Present materials from therapy sessions with clients in both small and large group situations. Continue the peer supervision relationships that were assigned in the previous semester, both as the supervisor and the supervisee. Evaluate and provide feedback of your own and your peers' supervisory performance. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
PSYCH/I SY E 854 - SPECIAL TOPICS IN ORGANIZATION DESIGN 1-3 credits.

Enroll Info: None
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.
Enroll Info: None
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

## PSYCH/ANTHRO 906 - METHODS AND HYPOTHESIS-TESTING FOR

 BEHAVIORAL ECOLOGISTS1-3 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. Enroll Info: None
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 - SEMINAR-PSYCHOMETRIC METHODS
2-3 credits.
Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
PSYCH 913 - SEMINAR - HISTORY OF PSYCHOLOGY
2-3 credits.

Overview of the history of psychology and its relevance to current issues in the discipline. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013
PSYCH 918 - SEMINAR-GENERAL PSYCHOLOGY
1-3 credits.

Enroll Info: Grad st prev cons inst
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 930 - SEMINAR-SOCIAL PSYCHOLOGY

2-3 credits.

## Enroll Info: None

Requisites: 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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

## PSYCH/ENTOM/ZOOLOGY 950 - INTERDISCIPLINARY SEMINAR IN ANIMAL BEHAVIOR <br> 1 credit.

Research methods in animal behavior studies in many disciplines. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013
PSYCH 954 - SEMINAR-PHYSIOLOGICAL PSYCHOLOGY
2-3 credits.
Enroll Info: None
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. Enroll Info: None
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

## PSYCH/COUN PSY/ED PSYCH/RP \& SE 995 - PREDOCTORAL INTERNSHIP <br> 0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship. Enroll Info: None
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

## PUBLIC HEALTH (PUBLHLTH)

## 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. Enroll Info: None
Requisites: Graduate/professional standing, or declared in Global Health Capstone Certificate
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## PUBLHLTH 711 - GLOBAL PUBLIC HEALTH AND HEALTHCARE SYSTEMS: ORGANIZATIONS, GOVERNANCE, FINANCING, AND WORKFORCE <br> 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 internallydisplaced persons. Presumes some background and understanding of basic principles of health and addresses topics at a graduate level. Enroll Info: None
Requisites: Graduate/professional standing, or declared in Global Health Capstone Certificate
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## PUBLHLTH 712 - GLOBAL HEALTH: INFECTIOUS DISEASES, ONE HEALTH, AND PREVENTION STRATEGIES <br> 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. Enroll Info: None
Requisites: Graduate/professional standing, or declared in Global Health Capstone Certificate
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Graduate/professional standing, or declared in Global Health Capstone Certificate
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

## PUBLHLTH 714 - GLOBAL HEALTH FIELD WORK FUNDAMENTALS: ENGAGEMENT, ETHICS, POLICY, AND METHODS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing, or declared in Global Health Capstone Certificate
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## PUBLHLTH/NURSING/PHARMACY/PHY ASST/PHY THER 758 INTERPROFESSIONAL PUBLIC HEALTH LEADERSHIP <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## PUBLHLTH 782 - DETERMINANTS OF HEALTH AND HEALTH EQUITY: A

 SYSTEMS APPROACH3 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020
PUBLHLTH 787 - MPH APPLIED PRACTICE EXPERIENCE SEMINAR 1 credit.

Prepares Master of Public Health students for applied practice experience in a community setting. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None Requisites: POP HLTH 787
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## PUBLHLTH 790 - MASTER OF PUBLIC HEALTH CULMINATING SEMINAR

2 credits.

Integrate public health knowledge, skills and practice acquired through didactic and experiential courses to find solutions to complex or "wicked" public health issues using public health tools and models that apply systems thinking, cultural humility and evidence-based decision-making. Enroll Info: None
Requisites: PUBLHLTH 788
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: PUBLHLTH 781
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: PHYSICS 104, 202, 208, or 248 or 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 2020
RADIOL 711 - JOURNAL CLUB
1 credit.
Student Seminar and Journal club for second year students in the Medical Scientist Training Program. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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

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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812, and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020

## RADIOL 923 - CLINICAL NUCLEAR MEDICINE ELECTIVE

 2 creditsWork 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. Enroll Info: None
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
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. Enroll Info: None
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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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 survey course. Decision-making processes for the manufacture, marketing, management and financing of real estate space Survey of institutional context, economics of urbanization, historical pattern and structure of city growth, and public policy issues regarding urban environment and business management. Enroll Info: None
Requisites: Sophomore standing and (ECON 101 or 111) or member of 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: Fall 2020
REAL EST 312 - REAL ESTATE LAW
3 credits.
The basic 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, including both office and retail leases, and an overview of international legal systems. Enroll Info: None
Requisites: URB R PL/A A E/ECON/REAL EST 306 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
REAL EST 365 - CONTEMPORARY TOPICS
1-3 credits.
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

## REAL EST 399 - READING AND RESEARCH-URBAN LAND ECONOMICS

 1-6 credits.Individual work suited to the needs of undergraduate students. Enroll Info: None
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 2020

## REAL EST 410 - REAL ESTATE FINANCE

3 credits.
Fundamentals of real estate finance; sources of funds, alternative financing instruments, and mortgage securitization; analysis emphasizing cash flow projections, yield and risk for residential and commercial real estate; pricing of mortgage securities. Enroll Info: None
Requisites: URB R PL/A A E/ECON/REAL EST 306 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

REAL EST 415 - VALUATION OF REAL ESTATE
3 credits.
Techniques of real estate valuation. Market analysis, legal and political analysis, and highest and best use analysis; in-depth exposure to the three approaches to valuation; market comparison, income, and cost; the role of valuation in real estate investment; government regulation of appraisers. Enroll Info: None
Requisites: URB R PL/A A E/ECON/REAL EST 306 or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020
REAL EST/ECON/URB R PL 420 - URBAN AND REGIONAL ECONOMICS 3 credits.

Nature and structure of urban economies; location of economic activity; economic analysis in an urban framework; principles of urban economic development, housing, transportation, poverty and unemployment and municipal finance. Forecasting of economic activity using census and socioeconomic data. Enroll Info: None
Requisites: (ECON 101 or 111) or member of Business Exchange program Course Designation: Breadth - Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: URB R PL/A A E/ECON/REAL EST 306 or member of 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (REAL EST 410 and 415) or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## REAL EST 631 - REAL ESTATE EXCEL MODELING

1 credit.
Introduction to real estate modeling using Excel. 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. Enroll Info: None
Requisites: REAL EST/A A E/ECON/URB R PL 306 or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
REAL EST 632 - 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. Enroll Info: None Requisites: Concurrent enrollment in REAL EST 631 is required
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: REAL EST 410
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: 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
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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: Sophomore standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020
REAL EST 740 - REAL ESTATE EQUITY INVESTMENT
3 credits
Fitting investment strategy to context of physical property, leverage, form of ownership, income tax and management alternatives. Emphasis is on analysis of limited partnerships, trusts, corporate real estate enterprises, and securitization to fund real estate. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: REAL EST 710 and 715
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
REAL EST 765 - CONTEMPORARY TOPICS
1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate standing and REAL EST 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

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. Enroll Info:
None
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

REAL EST 990 - REAL ESTATE INDEPENDENT RESEARCH PHD THESIS 1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.
Enroll Info: None
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 2013
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. Enroll Info: None
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 2020

## REHABILITATION MEDICINE (RHAB <br> MED)

RHAB MED 699 - INDEPENDENT STUDY
$0-5$ credits.
Independent study projects as arranged with faculty or instructional staff. Enroll Info: None
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 2020

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.) Enroll Info: None
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

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. Enroll Info: None
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 2020

## RHAB MED 923 - PHYSICAL MEDICINE AND REHABILITATIONMARSHFIELD <br> 2-12 credits.

Clinical elective for fourth year medical students. Enroll Info: None Requisites: 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

## 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. Enroll Info: None 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 2020

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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020

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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Rehabilitation Psychology, Health Promotion and Health Equity, or classified as Pre-Rehabilitation Psychology or PreSpecial Education
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## RP \& SE 325 - SELF MANAGEMENT OF CHRONIC ILLNESS AND DISABILITY <br> 3 credits.

Provides knowledge and understanding of concepts of self-management of chronic Illness and disability using both theoretical and empiricallybased 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. Enroll Info: None
Requisites: Declared in Health Promotion and Health Equity
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None 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 PreSpecial Education
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## RP \& SE/CURRIC 365 - TEACHING MATHEMATICS IN INCLUSIVE SETTINGS <br> 4 credits.

Designed to introduce preservice teachers to a variety of approaches for teaching mathematics to students in inclusive schools. Enroll Info: None Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
RP \& SE 401 - AUGMENTATIVE AND ALTERNATIVE COMMUNICATION AND ASSISTIVE TECHNOLOGY FOR STUDENTS WITH DISABILITIES 1 credit.

Covers theoretical foundations for the assessment and selection of assistive technology and augmentative and alternative communication (AAC) for students with disabilities. Enroll Info: None
Requisites: Declared in Special Education BSE, Rehabilitation Psychology BS, or Certificate in Disability Rights and Services
Repeatable for Credit: No
Last Taught: Spring 2020
RP \& SE 402 - METHODS IN TEACHING FUNCTIONAL SKILLS 1 credit.

Applies knowledge and skills for functional assessment and applied behavior analysis in the design and implementation of an individualized,
functional curriculum for students with moderate to profound intellectual disabilities and autism spectrum disorders. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
RP \& SE 403 - PROMOTING ADOLESCENT LITERACY FOR STUDENTS
WITH DISABILITIES
1 credit.
Designed to prepare future special educators to plan and provide language and reading instruction to adolescents with disabilities. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2019

RP \& SE 404 - METHODS IN TEACHING SCIENCE \& SOCIAL STUDIES FOR STUDENTS WITH DISABILITIES
1 credit.
Prepares future special educators to plan and provide Science and Social Studies instruction to a broad range of students with disabilities. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
RP \& SE 405 - CURRENT TOPICS IN SPECIAL EDUCATION
1 credit.
Explores current issues, topics, and trends in special education. Enroll

## Info: None

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2018
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. Enroll Info:

## None

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 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. Enroll Info: None
Requisites: Declared in Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert

## Repeatable for Credit: No

Last Taught: Spring 2020

## RP \& SE 464 - DIAGNOSIS, ASSESSMENT, AND INSTRUCTIONAL PLANNING IN SPECIAL EDUCATION <br> 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Spring 2020
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. Enroll Info: None 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 2020

## 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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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 2020

## RP \& SE 472 - METHODS IN TRANSITION AND VOCATIONAL EDUCATION <br> 3 credits.

Provides information and methods necessary to provide individualized programming in transition and vocational education for students with disabilities, grades six through twelve. Enroll Info: None
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 2020
RP \& SE 473 - CLASSROOM MANAGEMENT FOR INCLUSIVE CLASSROOMS
3 credits.
Focus on theories and practices to promote positive, proactive, and culturally responsive management of $\mathrm{K}-12$ inclusive classrooms. Topics covered include multi-tiered systems of support, functional behavior assessment, and behavioral intervention plan. Enroll Info: None
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 2020
RP \& SE 475 - SPECIAL EDUCATION PRACTICUM: ELEMENTARY (PK GRADE 9)
3-6 credits.
Practicum teaching in an approved placement with a qualified cooperating teacher serving students with disabilities in any of grades pre-K to 9, supervised by a qualified university supervisor. Placement schedule determined by course instructor. Enroll Info: None 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: Fall 2020

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. Enroll Info: None
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 2013

## RP \& SE 477 - SPECIAL EDUCATION STUDENT TEACHING: ELEMENTARY (PK - GRADE 9) <br> 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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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: Fall 2020

## RP \& SE 500 - REHABILITATION-COUNSELING PSYCHOLOGY: FOUNDATIONS <br> 3 credits.

History, philosophy, principles, legislation, and development of vocational rehabilitation; organizational structure and objectives of the principal community agencies. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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: Fall 2020
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. Enroll Info: None
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: Fall 2020
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. Enroll Info:

## None

Requisites: Sophomore standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## RP \& SE 515 - ACCESS TO THE GENERAL CURRICULUM FOR STUDENTS WITH DISABILITIES <br> 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. Enroll Info: None
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 2020

## RP \& SE 560 - PSYCHOSOCIAL ASPECTS OF CHRONIC ILLNESS AND DISABILITY <br> 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016

## RP \& SE 630 - INTERNSHIP IN REHABILITATION OR SPECIAL EDUCATION <br> 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## RP \& SE 690 - RESEARCH OR THESIS

1-3 credits.
Enroll Info: None
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

## RP \& SE 699 - INDEPENDENT READING

1-3 credits.
Enroll Info: None
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 2020

## RP \& SE 700 - RESEARCH METHODS IN REHABILITATION, MENTAL HEALTH, \& SPECIAL EDUCATION <br> 3 credits.

Research and program evaluation methods and understanding of published research in clinical rehabilitation counseling, mental health counseling, and special education settings. Enroll Info: None
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 2020

## RP \& SE 705 - DEVELOPMENT, LEARNING AND EDUCATION FOUNDATIONS IN SPECIAL EDUCATION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## RP \& SE 715 - EQUITY AND FULL PARTICIPATION FOR INDIVIDUALS WITH SIGNIFICANT DISABILITIES <br> 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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## RP \& SE 725 - CLINICAL REHABILITATION COUNSELING - CAREER DEVELOPMENT \& INTERVENTIONS

3 credits.
Career development and related interventions in clinical rehabilitation counseling practice. Enroll Info: None
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 2020
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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020
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. Enroll Info: None 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 2020

## RP \& SE 732 - CLINICAL REHABILITATION COUNSELING FOUNDATIONS <br> 3 credits.

History, development, principles, and theories and models of clinical rehabilitation counseling and psychosocial theory and research relevant to disability. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Declared in Rehabilitation Counselor Education
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## RP \& SE/COUN PSY/ED PSYCH 736 - SEMINAR IN PSYCHOLOGY OF INDIVIDUAL DIFFERENCES <br> 3 credits.

Seminar in the psychology of individual differences, providing broad and general coverage of theory and research related to individual and cultural differences. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## RP \& SE/COUN PSY/ED PSYCH 737 - SEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## RP \& SE 741 - COMPUTER SOFTWARE AND QUALITATIVE DATA ANALYSIS <br> 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. Enroll Info: RPSE 788 and RPSE 789 or consent of instructor
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. Enroll Info: None 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 2019
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. Enroll Info: None
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. Enroll Info:

## None

Requisites: RP \& 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: Summer 2020
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. Enroll Info: None Requisites: RP \& 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 2020

RP \& SE 810 - CINICAL REHABILITATION COUNSELING - COUNSELING TECHNIQUES
3 credits.
Basic counseling skills and techniques in clinical rehabilitation counseling practice. Enroll Info: None
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 2020
RP \& SE 820 - CLINICAL REHABILITATION COUNSELING - COUNSELING THEORIES
3 credits.
Theories of counseling and related interventions in clinical rehabilitation counseling practice. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: ELPA 735
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

RP \& SE 840 - CLINICAL REHABILITATION COUNSELING - GROUP COUNSELING
3 credits.
Theory and technique in group counseling in clinical rehabilitation counseling practice. Enroll Info: None
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 2020

## RP \& SE/ED POL/ED PSYCH/ELPA 842 - LEGAL FOUNDATIONS OF SPECIAL EDUCATION AND PUPIL SERVICES <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## RP \& SE 860 - REHABILITATION COUNSELING PSYCHOLOGY-CLINICAL PRACTICE SEMINAR <br> 1 credit.

Concurrent seminar for clinical practice students in RP \& SE 880, 890, and 900 or 910 . Enroll Info: None
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 2020

## RP \& SE 870 - REHABILITATION COUNSELOR EDUCATION ASSESSMENT THEORY \& RESEARCH <br> 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. Enroll Info: None
Requisites: Declared in Rehabilitation Counselor Education
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: RP \& SE 871
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

## Repeatable for Credit: No

Last Taught: Fall 2020
RP \& SE 880 - CLINICAL REHABILITATION COUNSELING - SUPERVISED
PRACTICUM I
3 credits.
Supervised experience in clinical rehabilitation counseling practice (beginning). Enroll Info: None
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 2020

## RP \& SE 890 - CLINICAL REHABILITATION COUNSELING - SUPERVISED PRACTICUM II <br> 3 credits.

Supervised experience in clinical rehabilitation counseling practice (intermediate). Enroll Info: None
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 2020

## RP \& SE 900 - CLINICAL REHABILITATION COUNSELING - SUPERVISED PRACTICUM III <br> 3 credits.

Supervised experience in clinical rehabilitation counseling practice (advanced). Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Declared in Rehabilitation Counselor Education
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## RP \& SE 910 - CLINICAL REHABILITATION COUNSELING - INTERNSHIP

 6-12 credits.Full-time supervised experience in clinical rehabilitation counseling. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020

RP \& SE 940 - REHABILITATION COUNSELOR EDUCATION SUPERVISED RESEARCH
1-3 credits.
Supervised experience in rehabilitation research and scholarship. Enroll Info: None
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 2020

RP \& SE 941 - INTERNSHIP. RESEARCH
1-3 credits.
Supervised participation in conducting, evaluation, and reporting university level research. Enroll Info: None
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
RP \& SE/COUN PSY/ED PSYCH 944 - INTERNSHIP PREPARATION
1 credit.
Prepare for internship by providing resources, guidelines, and support in selecting and applying to internship sites. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## RP \& SE 945 - INTERNSHIP IN REHABILITATION COUNSELOR

 EDUCATION I3 credits.
Supervised experience in counseling and direct service, supervision, teaching, research, and advocacy and leadership. Enroll Info: None 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 2020
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. Enroll Info: None Requisites: RP \& SE 945
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## RP \& SE 980 - CLINICAL REHABILITATION COUNSELING - ADVANCED ASSESSMENT PRACTICE <br> 3 credits.

Advanced assessment practices and interpretation of findings in clinical rehabilitation counseling, including the assessment of intelligence, neuropsychological functioning, and personality. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: Declared in Rehabilitation Counselor Education
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## RP \& SE 984 - REHABILITATION COUNSELOR EDUCATION COUNSELING THEORY \& RESEARCH <br> 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. Enroll Info: None
Requisites: Declared in Rehabilitation Counselor Education
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## RP \& SE 985 - ADVANCED METHODOLOGIES IN DISABILITY \& REHABILITATION RESEARCH <br> 3 credits.

Advanced statistical methods, design, instrumentation, and procedures in research and program evaluation in disability and rehabilitation settings. Enroll Info: None
Requisites: Declared in Rehabilitation Counselor Education
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## RP \& SE 988 - REHABILITATION COUNSELOR EDUCATION DISSERTATION RESEARCH SEMINAR <br> 1 credit.

Seminar taken in conjunction with RP \& SE 990 to facilitate conceptualization, methodology, presentation, writing, and defense of the dissertation proposal and research. Enroll Info: None
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
RP \& SE 990 - RESEARCH OR THESIS
1-3 credits.
Enroll Info: None
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

## RP \& SE/COUN PSY/ED PSYCH/PSYCH 995 - PREDOCTORAL INTERNSHIP <br> 0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship. Enroll Info: None
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
RP \& SE 999 - INDEPENDENT READING
1-3 credits.
Enroll Info: Cons inst (PhD stdts)
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

## 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. Enroll Info: None
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 meaningmaking? 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? Enroll Info: None
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

## 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. It 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. Enroll Info: None

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 2020
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. Enroll Info: None
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
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. Enroll Info: None
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 2018

## RELIG ST/HISTORY 131 - INTRODUCTION TO CHRISTIANITY: JESUS TO THE PRESENT <br> 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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Either Humanities or Social Science
Level - Elementary
\&S Credit - Counts as Liberal Arts and Science credit in L\&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 wellbeing. 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. Enroll Info: None
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 2020

## RELIG ST 200 - INTRODUCTORY TOPICS IN RELIGIOUS STUDIES (HUMANITIES) <br> 3-4 credits.

Topics in religious studies in the humanities at an introductory level
Enroll Info: None
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
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. Enroll Info: None
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/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. Enroll
Info: None
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

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. Enroll Info: None
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
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. Enroll Info: Sophomore standing or one HISTORY course or one REL ST course
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: Fall 2018
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. The course 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. Enroll Info: None Requisites: Sophomore standing or one HISTORY class or one REL ST class
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

RELIG ST/JEWISH 211 - INTRODUCTION TO JUDAISM
4 credits.
General introduction to Judaism covering the biblical, classical rabbinic, medieval, and modern periods. Enroll Info: None
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/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. Enroll Info: Sophomore standing or consent of instructor
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 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. Enroll Info:

## None

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

RELIG ST/CLASSICS/JEWISH/LITTRANS 227 - INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)
4 credits.
Introduction to the literature and literary history of the Old Testament, Apocrypha, Dead Sea Scrolls, Talmud, and Midrashim. Enroll Info: Not open to students that have completed HEBR ST 217
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: No
Last Taught: Fall 2020
RELIG ST/HISTORY 230 - JUDAISM, CHRISTIANITY, AND ISLAM: BRAIDED HISTORIES
3 credits.
An examination of the braided histories of Judaism, Christianity and Islam from 2000 BCE to 2000 CE, emphasizing their theological, cultural, and political relationships. Enroll Info: None
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 2015
RELIG ST/ILS 234 - GENRES OF WESTERN RELIGIOUS WRITING 3 credits.

Writing intensive course based on the conventions in which Western writers have expressed religious ideas. Readings from Jewish, Christian and other spiritualities. Enroll Info: Successful completion of or exemption from Com A requirement. Open to Fr
Requisites: None
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 2020
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. Enroll Info: None
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

## RELIG ST/LITTRANS/MEDIEVAL 253 - OF DEMONS AND ANGELS. DANTE'S DIVINE COMEDY <br> 3 credits.

Have you ever wondered about human nature? What is our place in this world? Through readings, videos, and original images, we will 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, we will 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. We will 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. Enroll Info: None
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/LITTRANS 257 - LITERATURES OF MUSLIM SOCIETIES IN TRANSLATION

3 credits.
Enroll Info: Open to Fr. LCA majors and all Grads register for LCA 357
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: No
Last Taught: Spring 2014
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. Enroll Info: 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? This course 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, course gives overview of some approaches in the environmental humanities related to philosophy, history, sociology and anthropology, and ethics. Fulfills requirement for Environmental Studies and Religious Studies degree programs. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019
RELIG ST 271 - RELIGION IN HISTORY AND CULTURE: THE WEST 3 credits.

An interdepartmental, multidisciplinary survey of the major religious traditions of prehistory; the ancient near east; the ancient Mediterranean; biblical, post-biblical and contemporary Judaism; Christianity; Islam; and selected topics for comparative-historical study. Enroll Info: None
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: Summer 2014
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. Enroll Info: 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. Students will examine the history of food in rabbinic Judaism. In addition, theories from the field of food studies will be applied to rabbinic texts. Enroll Info: None
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. While surveying a variety of themes from Native AmericanEuropean encounters to the present, the course employs significant court cases to focus on the tension between a quest for American consensus and an abiding religious and cultural pluralism. Enroll Info: None
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

## 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. Enroll Info: None
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/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. Enroll Info: None
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 2020
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. Enroll Info: 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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2019

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. Enroll Info: Not open to students with credit for LCA 421 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 2020
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. Enroll Info: 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 2019
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. Enroll Info: So st
Requisites: None
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/HISTORY 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." Enroll Info: None
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/HISTORY/MEDIEVAL 318 - MEDIEVAL SOCIAL AND
INTELLECTUAL HISTORY, 1200-1450
3-4 credits.

Emphasis on social change and intellectual developments. Enroll Info: So st

Requisites: None
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 2012

## 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. It examines how Christians in a variety of situations and in a variety of ways shape and are shaped by capitalism and other economic forms. It 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. Enroll Info: None
Requisites: Sophomore standing
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&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. Enroll Info: None
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: No
Last Taught: Spring 2019

RELIG ST/HIST SCI/MED HIST 331 - SCIENCE, MEDICINE AND RELIGION
3-4 credits.
Science, medicine and religion from antiquity to the present, with emphasis on Western civilization. Enroll Info: None
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

## RELIG ST/CLASSICS/HEBR-BIB/JEWISH/LITTRANS 332 - PROPHETS OF THE BIBLE <br> 4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English). Enroll Info: None
Requisites: 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

## RELIG ST 333 - EARLY CHRISTIAN LITERATURE: MATTHEWREVELATION

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. Enroll Info: None

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: No
Last Taught: Fall 2018

## RELIG ST/HISTORY 334 - THE REFORMATION

3-4 credits
The division of Western Christendom, 1500-1650, and its impact on Europe and the world. Enroll Info: So st
Requisites: None
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 2012

## RELIG ST/CLASSICS/JEWISH 335 - KING DAVID IN HISTORY AND TRADITION <br> 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. Enroll Info: Sophomore standing
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: No
Last Taught: Spring 2020

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. Enroll Info: None
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/FOLKLORE/MEDIEVAL/SCAND ST 342 - NORDIC
MYTHOLOGY
3 credits.
Mythology, literature, ritual, traditions, medieval folklore, and religion from
Nordic areas and Scandinavia. Enroll Info: None
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
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. Enroll Info:
ANTHRO 104 or cons inst
Requisites: None
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 2018
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. Enroll Info: Sophomore standing
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: 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. Enroll Info: 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

## 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. Enroll Info: None
Requisites: None
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 2020

## RELIG ST/ENVIR ST/HIST SCI 356 - ISLAM, SCIENCE \& TECHNOLOGY,

 AND THE ENVIRONMENT3-4 credits
Survey of Muslim religious understandings of science, technology, nature and environment. Lectures and readings present 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. Enroll Info: Sophomore standing
Requisites: None
Course Designation: Breadth - Humanities
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
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. Enroll Info: So st
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: 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. Enroll Info: None
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 361 - EARLY CHRISTIAN LITERATURE: PAULINE CHRISTIANITY
3 credits.
By conventional reckoning, Paul was a major contributor to the development of Christianity. This course analyzes both Paul's and other contemporary writings to assess the extent to which he contributed to the development of the early church. Enroll Info: None
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: No
Last Taught: Spring 2020
RELIG ST/ASIAN 362 - INTRODUCTION TO CONFUCIANISM 3 credits.

The development of Confucianism in pre-Buddhist China emphasizing interactions with competing viewpoints. Particular attention to issues of morality and human nature, stressing the roots of Confucianism in more general theories of value. All readings in translation. Enroll Info: Not open to students with credit for RELIG ST 363 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 2014
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. Enroll Info: 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

RELIG ST/ART HIST 373 - GREAT CITIES OF ISLAM
3 credits
This course offers 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. Integrating historical and religious studies, this course highlights the shifting nature of Islamic culture, from the tenth century CE to the present. Enroll Info: Sophomore standing
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: Fall 2019

RELIG ST/COM ARTS 374 - THE RHETORIC OF RELIGION
3 credits.
Rhetorical character of religious controversy and sectarian persuasion in Western religion. Enroll Info: None
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

RELIG ST/HISTORY 379 - ISLAM IN IRAN
3 credits.

History of Islam in Iran from Arab conquest in the seventh century to the Islamic Revolution in 1978-89. Enroll Info: So st
Requisites: None
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 2013

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. Enroll Info: So st or cons inst
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: Fall 2020

RELIG ST 401 - TOPICS IN RELIGIOUS STUDIES - SOCIAL STUDIES 3-4 credits.

Topics in religious studies in the social sciences. Enroll Info: None
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 2015
RELIG ST 403 - TOPICS IN RELIGIOUS STUDIES-US ETHNIC STUDIES
3-5 credits.

Topics in Religious Studies-US Ethnic Studies. Topics in historical or contemporary religious culture and society pertaining to persistently marginalized racial or ethnic groups in the United States. Enroll Info:
Sophomore standing
Requisites: None
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. Enroll Info: None
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 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. Enroll Info: None
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 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 our studies of children's lives in various religious communities in America (mostly), we will explore how including children's perspectives shifts general claims about religious groups and their practices. Enroll Info: None
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

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. Enroll Info: None
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 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. Facilitated by the instructor or other practicing scholars (Religious Studies faculty affiliates or visiting scholars) to apply real-time, group-created interpretation to weekly focus issues. Enroll Info: None
Requisites: Declared in Religious Studies major, certificate or 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 Ramayama 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None 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. Enroll Info:

## None

Requisites: 3 credits of 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.
Therevada 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. Enroll Info: 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/HISTORY 439 - ISLAMIC HISTORY FROM THE ORIGIN OF ISLAM TO THE OTTOMAN EMPIRE
3-4 credits.
Political action and organization in medieval Islam (ca 600-1500), with
focus on selected states. Enroll Info: So st
Requisites: None
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

## RELIG ST/MEDIEVAL 440 - FRANCIS OF ASSISI: LITERATURE AND THE ARTS

3 credits.
Francis of Assisi: Literature and the Arts." Focus on accounts of St. Francis's life as written by medieval authors (e.g., Bonaventure of Bagnoregio, Thomas of Celano, the Franciscan Brother Leo) as well as works written by Francis himself. Examination of the relevance of Francis's teachings to contemporary reflections regarding relationships with the Other, the environment and animals. Discussion of issues related to religion, politics, bio-politics and environmental studies. Enroll Info: Sophomore standing or above
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: No
Last Taught: Spring 2015
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. Enroll Info: 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/JEWISH 448 - CLASSICAL RABBINIC TEXTS

3 credits.
Introduction to the language and literature of the rabbinic period in Judaism (2nd-7th century CE). Acquisition of language skills to read Hebrew texts of this period, including Mishna, Tosephta, and Midrash.
Enroll Info: Hebrew 202 or 324 or consent of instructor
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: No
Last Taught: Fall 2012

RELIG ST/ASIAN 460 - THE HISTORY OF YOGA
3 credits.
Explores the history of Yoga techniques from the ancient to the modern period. Enroll Info: Not open to students with credit for RELIG ST 623 prior to Spring 2019.
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 2020
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. Enroll Info: 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 472 - CHRISTIAN LITERATURE: THE GOSPELS
3 credits.
The first century Gospels show how early Christians used traditions about Jesus' deeds and words to define themselves and others. This course investigates how those Gospels were composed and how their authors portrayed Jesus so as to address their concerns. Enroll Info: None
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: No
Last Taught: Spring 2013
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. Enroll Info: Not open to students with credit for LCA 624 prior to Fall 2019.
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 2020

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. Enroll Info: Undergrads: a prev crse in art hist or relig studies satisfaction of Com B requirement. Knowledge of Asian religion recommended 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: 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. Enroll Info: None 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. Enroll Info: None
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
Repeatable for Credit: No
Last Taught: Fall 2019

## RELIG ST/PHILOS 502 - SPECIAL TOPICS IN PHILOSOPHY OF RELIGION <br> 3 credits.

One or more topics selected from among the following: religious discourse, God, evil, survival, great philosophers of religion, etc. Variable content. Enroll Info: None
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
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2013

## RELIG ST/ASIAN 505 - THE PERFECTIBLE BODY IN RELIGIONS, MEDICINES, AND POLITICS <br> 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. Enroll Info: None
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. Enroll Info: None
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

## RELIG ST/CLASSICS/HISTORY 517 - RELIGIONS OF THE ANCIENT MEDITERRANEAN <br> 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. Enroll Info: Sophomore Standing
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: Spring 2017

## RELIG ST 600 - RELIGION IN CRITICAL PERSPECTIVE

3 credits.
Readings in the analysis of religion as a human phenomenon from various perspectives, such as: skeptical and sympathetic views toward religion; theories of religion's origins and functions; and examinations of religious awe. Should be taken junior year. Seminar format. Enroll Info: Jr st cons inst. Preference given to religious studies majors
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 2020

## 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. Only for students in religious studies. This course takes
the place of $695+697$. Enroll Info: None
Requisites: Declared in Religious Studies major
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
RELIG ST/ASIAN 620 - PROSEMINAR: STUDIES IN RELIGIONS OF ASIA 3 credits.

Historical and structural analysis and discussion of specific topics in one or more religions of Asia. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Spring 2013
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. Enroll Info: None
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 2017

RELIG ST/ANTHRO 666 - THE ANTHROPOLOGY OF SHAMANISM AND OCCULT EXPERIENCE
3 credits.
Shamanism is a global form of religious practice involving direct contact with the spirit world through ecstatic and magical techniques. This course examines shamanic practice and considers allied forms of occult experience outside of the major world religions. Enroll Info: So st
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 2011

## RELIG ST 681 - SENIOR HONORS THESIS

3 credits.

Independent research undertaken by students in the honors program.
Enroll Info: Honors candidate cons inst
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

## RELIG ST 682 - SENIOR HONORS THESIS

3 credits.
Independent research undertaken by students in the honors program.
Enroll Info: Honors candidate cons inst
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 2020
RELIG ST 691 - SENIOR THESIS
3 credits.
Enroll Info: None
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 2011
RELIG ST 692 - SENIOR THESIS
3 credits.

Enroll Info: None
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 2012

RELIG ST 695 - RESEARCH COLLOQUIUM FOR MAJORS 1 credit.

Colloquium for students conducting research under Religious Studies 697, wich must be taken concurrently. Discussion of problems that arise in conducting research, interpreting evidence, and composing an argument. Students will present research-in-progress for group discussion. Enroll Info: RELIG ST 600, major in religious studies, cons inst. Con reg in RELIG ST 697
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 2013
RELIG ST 697 - INDEPENDENT RESEARCH FOR MAJORS
3 credits.
Original research project supervised by individual faculty; only for students majoring in religious studies. Topics depend upon students' interest and faculty members' expertise. Students must register concurrently in Religious Studies 695. Enroll Info: RELIG ST 600, major in religious studies, cons inst. Con reg in RELIG ST 695
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 2013
RELIG ST 699 - DIRECTED STUDY
1-4 credits.
Enroll Info: None
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 2020
RELIG ST 799 - INDEPENDENT RESEARCH
1-6 credits.
Independent research for graduate students. Enroll Info: None
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 858 - SEMINAR IN PROBLEMS OF ISLAMIC
HISTORY
2-3 credits.
Social and economic history of North Africa and the Middle East in Islamic and modern times. Enroll Info: Grad st knowledge of appropriate foreign 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 2011

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. Enroll Info: None
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. Enroll Info: None
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 <br> INSURANCE (R MI)

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. Enroll Info: None
Requisites: (ECON 101 or 111) or member of Business Exchange program. Not open to graduate 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: Fall 2020
R M I 365 - CONTEMPORARY TOPICS
1-3 credits
Exploration of subject areas possibly to be introduced into the business curriculum. Enroll Info: None

Requisites: None
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. Enroll Info: None
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

## R M I/ECON 530 - INSURING LIFE'S RISKS: HEALTH, AGING, AND <br> POLICY <br> 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. Enroll Info: None.
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 2020

## R M 1610 - 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. Enroll Info: None
Requisites: R M I 300 or 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. Enroll Info: None

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. Enroll Info: None

Requisites: R M I 300 or graduate standing or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (R M I 300 or 700 ) or member of Business Exchange program Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: (R M I 300 or 700) or member of Business Exchange program Repeatable for Credit: No
Last Taught: Fall 2020

## R M I 650 - SUSTAINABILITY, ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT <br> 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. Enroll Info: None Requisites: Junior standing
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: (R M I 300 or graduate standing) and (GEN BUS 306, 704,
STAT/MATH 309, or 311) and (FINANCE/ECON 300 or FINANCE 700); or member of Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2020

## R M I 660 - RISK ANALYTICS AND BEHAVIORAL SCIENCE <br> 2-3 credits.

An overview about the challenges people face in situations with risk and uncertainty with a goal of enhancing students' 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. Enroll Info: None
Requisites: (R M I 300 or graduate/professional standing) and
(GEN BUS 306, STAT/MATH 309, STAT 311 or STAT/MATH 431)
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business

## Exchange program

Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

## R M I 765 - CONTEMPORARY TOPICS

1-4 credits
Exploration of advanced subject areas possibly to be introduced into the business curriculum. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
R M I 799 - READING AND RESEARCH-RISK MANAGEMENT 1-6 credits.

Individual work suited to the needs of graduate students may be arranged. Enroll Info: None
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
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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
R M I 875 - SEMINAR-RISK MANAGEMENT AND INSURANCE 3 credits.

Applied learning in risk management and insurance. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing or member of Business Exchange program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## R M I 930 - SEMINAR IN ACTUARIAL SCIENCE, RISK MANAGEMENT \& INSURANCE II <br> 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. Enroll Info: None
Requisites: Graduate/professional standing or member of 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## SCANDINAVIAN STUDIES (SCAND ST)

## SCAND ST 101 - FIRST SEMESTER NORWEGIAN

4 credits.
Spoken and written Norwegian for students without previous knowledge; lab. Enroll Info: None
Requisites: None
Course Designation: Frgn Lang - 1 st 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

## SCAND ST 102 - SECOND SEMESTER NORWEGIAN

4 credits
Continuation of 101 Enroll Info: SCAND ST 101
Requisites: None
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
SCAND ST 111 - FIRST SEMESTER SWEDISH
4 credits.
Spoken and written Swedish for students without previous knowledge
lab. Enroll Info: None
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 2020
SCAND ST 112 - SECOND SEMESTER SWEDISH
4 credits.

Continuation of 111 Enroll Info: SCAND ST 111
Requisites: None
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

SCAND ST 121 - FIRST SEMESTER DANISH
4 credits
Spoken and written Danish for students without previous knowledge; lab. Enroll Info: None

Requisites: None
Course Designation: Frgn Lang - 1st semester language course Level - Elementary
\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
SCAND ST 122 - SECOND SEMESTER DANISH
4 credits.

Continuation of 121 Enroll Info: SCAND ST 121
Requisites: None
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

SCAND ST 131 - FIRST SEMESTER FINNISH
4 credits
Spoken and written Finnish for students without previous knowledge.
Enroll Info: None
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
SCAND ST 132 - SECOND SEMESTER FINNISH
4 credits.

Spoken and written Finnish for students without previous knowledge.
Continuation of Scand St. 131 Enroll Info: SCAND ST 131
Requisites: None
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

## SCAND ST 201 - SECOND YEAR NORWEGIAN

4 credits.

Rapid reading of suitable texts by modern writers. Enroll Info:
SCAND ST 102 or cons inst
Requisites: None
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
SCAND ST 202 - SECOND YEAR NORWEGIAN
4 credits.
Continuation of 201 Enroll Info: Cons inst or SCAND ST 201
Requisites: None
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
SCAND ST 211 - SECOND YEAR SWEDISH
4 credits.
Reading of selections from Swedish writers, grammar review and conversation. Enroll Info: SCAND ST 112 or cons inst
Requisites: None
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

## SCAND ST 212 - SECOND YEAR SWEDISH

4 credits.
Continuation of 211 Enroll Info: Cons inst or SCAND ST 211
Requisites: None
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
SCAND ST 221 - SECOND YEAR DANISH
4 credits.

Enroll Info: SCAND ST 122 or cons inst
Requisites: None
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
SCAND ST 222 - SECOND YEAR DANISH
4 credits.
Enroll Info: Cons inst or SCAND ST 221
Requisites: None
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

SCAND ST 251 - READINGS IN NORWEGIAN LITERATURE
3-4 credits

Prose, poetry, and drama read in the original. Norwegian used extensively as classroom language. Enroll Info: SCAND ST 202 or cons inst
Requisites: None
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## SCAND ST 261 - READINGS IN SWEDISH LITERATURE

3-4 credits
Prose, poetry, and drama read in the original. Swedish used extensively as classroom language. Enroll Info: SCAND ST 212 or cons inst
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 2020

## SCAND ST 271 - READINGS IN DANISH LITERATURE

3-4 credits
Prose, poetry, and drama read in the original. Danish used extensively as classroom language. Enroll Info: SCAND ST 222 or cons inst
Requisites: None
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: Yes, unlimited number of completions Last Taught: Fall 2020

## 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. Enroll Info: None
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

SCAND ST 296 - THE SCANDINAVIAN HERITAGE IN AMERICA
3 credits.

Nineteenth century Scandinavian immigration, with field trips. Enroll Info: None
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 2016

## SCAND ST 299 - DIRECTED STUDY

1-3 credits.

Enroll Info: Jr st. Graded on a lettered basis; requires cons inst
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 2020

## SCAND ST 302 - INTENSIVE FINNISH II

7 credits.
Classroom work and laboratory practice for 8 hours per week. Emphasis on written Finnish. Enroll Info: Scand St 301
Requisites: None
Course Designation: Frgn Lang - 3rd 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 2012

## SCAND ST/FOLKLORE/MEDIEVAL/RELIG ST 342 - NORDIC MYthology

3 credits.
Mythology, literature, ritual, traditions, medieval folklore, and religion from Nordic areas and Scandinavia. Enroll Info: None

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

## 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. Enroll Info: None
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

SCAND ST 373 - MASTERPIECES OF SCANDINAVIAN LITERATURE:
FROM THE MIDDLE AGES TO 1900
3-4 credits
From the Middle Ages to the 1970's. Enroll Info: 2 yrs of a Scand language or consent of instructor. 4th credit for Com-B stdts only. Open to Freshmen

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: No
Last Taught: Fall 2019

## SCAND ST 374 - MASTERPIECES OF SCANDINAVIAN LITERATURE: THE TWENTIETH CENTURY

3-4 credits.
Continuation of 373 Enroll Info: 2 yrs of a Scand language or consent of instructor. 4th credit for Com-B stdts only
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: No
Last Taught: Spring 2020

## SCAND ST 375 - THE WRITINGS OF HANS CHRISTIAN ANDERSEN

 3-4 creditsAndersen's art and vision through analysis of his major tales and selections from his other works. Enroll Info: 2 yrs of a Scand lang or cons inst. 4th cr for Com-B stdts only. Open to Fr
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: No
Last Taught: Summer 2014

## SCAND ST 401 - CONTEMPORARY SCANDINAVIAN LANGUAGES

3 credits.

Intensive work in spoken and written Danish, Norwegian, and Swedish, based on contemporary readings, for undergraduate and graduate students with a basic command of a Scandinavian language. Required of graduate students. Enroll Info: 3 yrs of Norwegian, Danish or Swedish or cons inst

Requisites: None
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

## 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.
Enroll Info: None
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 2020

SCAND ST/MEDIEVAL 407 - OLD NORSE
3 credits.
Reading of texts from the Sagas and Eddas, with comparative study of linguistic structure and literary style. Enroll Info: Grad st or cons inst
Requisites: None
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

## 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. Enroll Info: None
Requisites: 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 2019

## SCAND ST/MEDIEVAL 409 - SURVEY OF OLD NORSE-ICELANDIC LITERATURE <br> 3 credits

Eddic and skaldic poetry; homilies and saints' lives, kings' sagas, sagas of the Icelanders; mythical-heroic sagas and romances; rimur. Enroll Info: Grad st or cons inst; or Scand St/MEDIEVAL/SCAND ST 407
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

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. Enroll Info: None
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 2019

## SCAND ST 411 - AREAS IN SCANDINAVIAN LITERATURE

1 credit.
Concentrated study of topics within Scandinavian literature. Enroll Info: 5 semesters or equiv in a Scand language
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## SCAND ST 415 - HISTORY OF THE SCANDINAVIAN LANGUAGES II: STANDARD LANGUAGES <br> 3 credits.

Study of Scandinavian languages from the early Scandinavian period to the present day. Enroll Info: Grad st or cons inst; Scand St 414
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 2019
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. Enroll Info: Jr st 2 yrs of a Scand lang
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
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.

Advanced study of topics in Nordic and Nordic-American history, culture, and/or folklore. Enroll Info: None

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. Enroll Info: Jr St 2 yrs of a Scand lang
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## SCAND ST 423 - THE DRAMA OF AUGUST STRINDBERG

 4 credits.Ideas and dramatic practice in the plays. Enroll Info: Jr St 2 yrs of a Scand lang
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
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. Enroll Info: Jr St 2 yrs of a Scand lang
Requisites: None
Course Designation: Breadth - Literature. Counts toward the Humanities req
Level - Advanced
\&S Credit - Counts 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 426 - KIERKEGAARD AND SCANDINAVIAN LITERATURE 4 credits.

Close study of a limited number of writers (e.g., Kierkegaard, Andersen, Brandes, Hamsun, Nexo, Undset, Lagerkvist) for their intellectual content. Enroll Info: Jr St 2 yrs of a Scand lang
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012

SCAND ST 427 - CONTEMPORARY SCANDINAVIAN LITERATURE 4 credits.

Twentieth-century literary traditions and experiments, with attention to major movements, genres, and authors. Enroll Info: Jr St 2 yrs of a Scand lang
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
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. We 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, we 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. Enroll Info: None 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 429 - MYTHOLOGY OF SCANDINAVIA

4 credits.

First: an introduction to the pagan religion of Scandinavia, with readings in some of the primary sources (eddaic and skaldic poetry, Snorri Sturluson's Prose Edda, etc.) Second: broadens the definition of mythology to embrace concepts applicable to more recent literature and literary criticism. Enroll Info: Jr St 2 yrs of a Scand lang
Requisites: Junior standing; not open to special students 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/MEDIEVAL 430 - THE VIKINGS

4 credits.
Within a historical framework, a thorough introduction to the culture, literature, and religion of the Vikings. Enroll Info: Jr St or cons inst. Knowledge of a Scand lang is not required
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 2020
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 DenmarkNorway; emphasis on the interplay between social and political forces and institutions and the area's relationship with the rest of Europe. Enroll Info: So st
Requisites: None
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 2020

## 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. Enroll Info: None
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
SCAND ST 434 - THE ART OF ISAK DINESEN/KAREN BLIXEN 4 credits.

Blixen's tales and biographical fiction. Enroll Info: 2 yrs of a Scand lang
Requisites: Junior standing; not open to special students
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 2019

## SCAND ST/LITTRANS 435 - THE SAGAS OF ICELANDERS IN ENGLISH TRANSLATION <br> 3 credits.

The prose narratives of medieval Iceland, taught in English. 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. Enroll Info: None
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 2020

## SCAND ST 436 - TOPICS IN SCANDINAVIAN LITERATURE

 3-4 credits.An examination of selected topics in Scandinavian literature designed for Scandinavian majors and other students. Enroll Info: Requisite varies by topic
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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/FOLKLORE 440 - SCANDINAVIAN AMERICAN FOLKLORE

 3 credits.Examines the verbal, musical, customary, and material folklore of Scandinavian Americans, with emphasis on the upper Midwest. Requires field and archival research. Enroll Info: Jr st
Requisites: None
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 2017

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. Enroll Info: Jr st or cons inst
Requisites: None
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 2018

## SCAND ST/MEDIEVAL 444 - KALEVALA AND FINNISH FOLK-LORE

 4 credits.Kalevala and the oral literature of Finland. Enroll Info: Jr st or cons inst 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016

## 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 premodern Scandinavian, Scottish, Welsh and Irish sagas, histories, talkes. Discussion of the role of folklore in modern Celtic and Scandinavian societies. Enroll Info: So st or above required, or cons inst
Requisites: None
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

## SCAND ST 450 - SCANDINAVIAN DECADENCE IN ITS EUROPEAN CONTEXT <br> 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). Enroll Info: 2 yrs of a Scand lang or equivalent
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2016
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, independent student presentations, and a research paper, in addition to the coursework done in SCAND ST 375. Enroll Info: 2 yrs of Scand language or consent of instructor. Open to Freshmen
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 2 yrs of Nordic lang or cons inst. Open to Fr
Requisites: None
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 2019

## SCAND ST 496 - THE SCANDINAVIAN HERITAGE IN AMERICA

3 credits.
Nineteenth century Scandinavian immigration, with field trips. Enroll Info: 2 yrs of a Scand lang or cons inst
Requisites: None
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 2016

## SCAND ST 510 - TOPICS IN SCANDINAVIAN LINGUISTICS

 3 credits.Hands-on introduction to a topic in Scandinavian language study. Course topics designed to be relevant to graduates. Enroll Info: Grad st or cons inst; SCAND ST 415
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: Spring 2020

## 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. Enroll Info: Scand St/MEDIEVAL/SCAND ST 407 or 408

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 2020
SCAND ST 520 - SPECIAL TOPICS
3 credits.
Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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

## SCAND ST 630 - FUNDAMENTALS OF BIBLIOGRAPHY AND RESEARCH

 3 credits.Research resources and methodology; scholarly search and literary criticism. Enroll Info: None
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 2016
SCAND ST 634 - SURVEY OF SCANDINAVIAN LITERATURE: 1500-1800
3 credits.
Survey representative literary texts from Scandinavia spanning from the Baroque to the Rococo. Gain a general knowledge of the historical context that produced these texts. Particular concepts explained and explored include: Reformation, Renaissance, Baroque, Rococo and PreRomanticism. Enroll Info: None
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
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.
Romanticism, Realism, and Naturalism. Enroll Info: 2 yrs of a Scand lang or cons inst
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017
SCAND ST 681 - SENIOR HONORS THESIS
3 credits.

Enroll Info: None
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 2013

## SCAND ST 682 - SENIOR HONORS THESIS

3 credits

## Enroll Info: None

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 2014
SCAND ST 698 - DIRECTED STUDY
1-6 credits.
Graded on $\mathrm{Cr} / \mathrm{N}$ basis. Enroll Info: Sr st. Graded on a Cr/N basis; requires cons inst
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
SCAND ST 699 - DIRECTED STUDY
1-6 credits.
Graded on a letter basis. Enroll Info: Sr st. Graded on a lettered basis; requires cons inst
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 2020

## SCAND ST 710 - TOPICS IN DEPTH

1-2 credits
Penetrating study of an important Scandinavian literary or linguistic
topic. Content will vary with each offering. Enroll Info: None
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.

Enroll Info: None
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
SCAND ST 901 - SEMINAR IN SPECIAL TOPICS
2-3 credits.
Enroll Info: None
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 990 - RESEARCH AND THESIS

1-6 credits
Enroll Info: None
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
SCAND ST 999 - INDEPENDENT READING
1-6 credits.
Enroll Info: None
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.. Enroll Info: Prior college-level work in social studies (S, W, Y, or Z) or science (B, N, P, W, or X) or permission of instructor 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: Fall 2020
STS 403 - SPECIAL TOPICS IN SCIENCE \& TECHNOLOGY STUDIES 3 credits.

An interdisciplinary exploration of one or more high profile issues motivating debate and discussion among science and technology studies scholars. Topics will vary. Enroll Info: Sophomore standing 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: Spring 2013

STS 699 - DIRECTED STUDY
1-3 credits.
Available for undergraduates interested in STS, who have completed STS 201, but is intended primarily as a means for ISSuES certificate students to fulfill their capstone requirement. Enroll Info: STS 201; Jr/Sr St or cons inst
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 2020

STS/CURRIC 733 - PUBLIC ENGAGEMENT WITH SCIENCE 3 credits.

Public understanding of science and science literacy are both more and less necessary than we might think, and the capacity of non-scientists to make sense of science is a matter of rich and ongoing debate. Explore what it means for science to matter in everyday life through research, theory, and concrete examples. Readings are drawn from across the humanities and social sciences, with particular attention to the interdisciplinary field of science and technology studies. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## STS 901 - SCIENCE, TECHNOLOGY AND MEDICINE IN SOCIETY

3 credits.
Designed to introduce students to 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

STS 902 - CURRENT TOPICS IN SCIENCE AND TECNOLOGY STUDIES 1 credit.

Designed to introduce students to 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. Enroll Info: None
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

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. Topics will vary. Enroll Info: None
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 <br> 1-6 credits.

A turoial style course arranged between an STS graduate minor student and an STS faculty affiliate. The topic of the course, the specific reding requirements, writing, and student-faculty meetings will be outlined in a student-faculty "contract." Enroll Info: Only graduate students may take this course and may only do so in consultation with Holtz Center director and the affiliated faculty member with whom the student intends to work Requisites: 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

## SENIOR MEDICAL PROGRAM (SR <br> MED)

## SR MED 812 - THIRD YEAR PRIMARY CARE CLERKSHIP

1-8 credits.

The clerkship will be an outpatient clinic based eight-week continuity experience in two of the three primary care specialties (Family Medicine, Internal Medicine and Pediatrics). Enroll Info: 3rd yr Med st
Requisites: 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

## SR MED 813 - INTEGRATED CLINICAL NEUROSCIENCE CLERKSHIP

 1-6 creditsIntroduction to the examination (clinical, laboratory and imaging), diagnosis, and treatment of patients with commonly encountered diseases of the nervous system, as presented from the combined prerspectives of medical neurology, surgical neurology, ophthalmology, rehabilitation medicine, and neuroradiology. Enroll Info: 3rd yr Med st Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2013
SR MED 840 - SPECIAL FOURTH YEAR PRECEPTORSHIP/CLERKSHIP 1-16 credits.

Individually arranged clinical tutorial/evaluation for fourth year students. Enroll Info: 4th yr Med st
Requisites: 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
SR MED 852 - PRECEPTORSHIP-ASHLAND
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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
SR MED 853 - PRECEPTORSHIP-BEAVER DAM
1-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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
SR MED 854 - PRECEPTORSHIP-BELOIT
1-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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

SR MED 855 - PRECEPTORSHIP-BLACK RIVER FALLS
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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

SR MED 856 - PRECEPTORSHIP-EAU CLAIRE
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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
SR MED 858 - PRECEPTORSHIP-GREEN BAY
1-12 credits

Enroll Info: 4th yr Med st
Requisites: 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
SR MED 859 - PRECEPTORSHIP-JANESVILLE
1-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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
SR MED 860 - PRECEPTORSHIP-LACROSSE
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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
SR MED 862 - PRECEPTORSHIP-MARSHFIELD
1-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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
SR MED 863 - PRECEPTORSHIP-MILWAUKEE
1-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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

## SR MED 864 - PRECEPTORSHIP-MONROE

1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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
SR MED 865 - PRECEPTORSHIP-RHINELANDER
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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

## SR MED 866 - PRECEPTORSHIP-RICE LAKE

1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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

## SR MED 867 - PRECEPTORSHIP-SHAWANO

1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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
SR MED 868 - PRECEPTORSHIP-SHEBOYGAN
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: 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

SR MED 870 - PRECEPTORSHIP-VIROQUA
1-12 credits.

Enroll Info: 4th yr Med st
Requisites: 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

SR MED 871 - PRECEPTORSHIP-WAUSAU
1-12 credits.
Enroll Info: 4th yr Med st
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
SR MED 872 - PRECEPTORSHIP-WOODRUFF
1-12 credits.
Enroll Info: 4th yr Med st
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2012
SR MED 873 - PRECEPTORSHIP-PRAIRIE DU SAC
1-12 credits.
A required course for senior medical students, designed to improve their proficiency in patient care by providing them with increasing responsibility for the care of patients in a community under the supervision of an experienced preceptor. Enroll Info: 4th yr Med st Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
SR MED 875 - PRECEPTORSHIP-MINONG
1-12 credits.
Clinical elective for fourth year students. Enroll Info: 4th yr Med st
Requisites: 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
SR MED 877 - PRECEPTORSHIP-DODGEVILLE
1-12 credits.
Clinical elective for senior medical students. Enroll Info: 4th yr Med st
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 2011
SR MED 880 - PRECEPTORSHIP - CROSS PLAINS
1-12 credits.
Clinical elective for senior medical students. Enroll Info: 4th yr Med st 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

SR MED 883 - PRECEPTORSHIP - REEDSBURG
1-12 credits.
Clinical elective for senior medical students. Enroll Info: 4th yr Med st
Requisites: 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
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. Enroll Info: None 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

## 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. Enroll Info: None

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

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. Enroll Info: None 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

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. Enroll Info: None 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

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. Enroll Info: None 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

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. Enroll Info: None 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

## SR MED 926 - EXTRAMURAL ELECTIVE-OBSTETRICS AND GYNECOLOGY <br> 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. Enroll Info: None Requisites: 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

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. Enroll Info: None 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

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. Enroll Info: None
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

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. Enroll Info: None Requisites: 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
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. Enroll Info: None Requisites: 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

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. Enroll Info: None 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

## 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. Enroll Info: None Requisites: 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

## 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. Enroll Info: None 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

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. Enroll Info: None 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. Enroll Info: None 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

## SR MED 937 - EXTRAMURAL ELECTIVE CLERKSHIP IN INTERNATIONAL HEALTH <br> 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. Enroll Info: None
Requisites: 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

## SR MED 951 - TRAINING IN URBAN MEDICINE AND PUBLIC HEALTH (TRUIMPH) I: SEMINAR AND PROJECTS <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SR MED 955 - TRAINING IN URBAN MEDICINE AND PUBLIC HEALTH (TRIUMPH) III: LEADERSHIP <br> 2 credits.

Provides fourth year medical students with advanced leadership skill building exercises to address community and public health challenges in Milwaukee. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## SLAVIC (SLAVIC LANGUAGES) <br> (SLAVIC)

SLAVIC 101 - FIRST SEMESTER RUSSIAN
4 credits.
Five hours a week focusing on speaking, listening, reading and writing Russian, with an introduction to Russian culture. No previous knowledge of Russian expected. Enroll Info: None
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 2020
SLAVIC 102 - SECOND SEMESTER RUSSIAN
4 credits.
Continuation of SLAVIC 101. Enroll Info: SLAVIC 101 or equiv. Open to Fr Requisites: None
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

## SLAVIC 111 - FIRST SEMESTER POLISH

4 credits
For students who have not studied Polish. Enroll Info: None 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 2020
SLAVIC 112 - SECOND SEMESTER POLISH
4 credits.

Enroll Info: SLAVIC 111. Open to Fr
Requisites: None
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 115 - FIRST SEMESTER CZECH

4 credits.
Designed to help students acquire proficiency in Czech through understanding, speaking, reading and writing. For students who have not previously studied Czech. Enroll Info: None

## 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 2020
SLAVIC 116 - SECOND SEMESTER CZECH
4 credits.
Designed to help students acquire proficiency in Czech through understanding, speaking, reading and writing. For students who have not previously studied Czech. Continuation of SLAVIC 115. Enroll Info:
SLAVIC 115 or equiv
Requisites: None
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 2018
SLAVIC 117 - INTENSIVE SECOND YEAR RUSSIAN
4 credits.
Enroll Info: None
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: Summer 2020

SLAVIC 118 - INTENSIVE SECOND YEAR RUSSIAN
4 credits.
Enroll Info: None
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: Summer 2020
SLAVIC 141 - FIRST SEMESTER SERBO-CROATIAN
3 credits.
Designed to develop the primary language skills in Serbo-Croation (speaking, listening/understanding, reading, and writing). For students who have not previously studied Serbo-Croatian. Enroll Info: None
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.
Designed as a follow-up course to 141 as students continue to develop skills in Serbo-Croatian (speaking, listening/understanding, reading, and writing). Enroll Info: SLAVIC 141 or equiv. Open to Fr
Requisites: None
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 181 - RUSSIAN HONORS TUTORIAL FOR SLAVIC 101 1 credit.

Enroll Info: Con reg for hon cr in SLAVIC 101. Open to Fr
Requisites: Declared in honors program
Course Designation: 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 2018
SLAVIC 182 - RUSSIAN HONORS TUTORIAL FOR SLAVIC 102 1 credit.

Enroll Info: Con reg for hon cr in SLAVIC 102. Open to Fr
Requisites: Declared in honors program
Course Designation: 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 2019

SLAVIC 203 - THIRD SEMESTER RUSSIAN
4 credits.
Five hours a week focusing on speaking, listening, reading and writing
Russian, with continued study of Russian culture. Enroll Info: SLAVIC 102
or equiv. Open to Fr
Requisites: None
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
SLAVIC 204 - FOURTH SEMESTER RUSSIAN
4 credits.
Continuation of SLAVIC 203. Enroll Info: SLAVIC 203 or equiv. Open to Fr
Requisites: None
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

## SLAVIC 207 - THIRD SEMESTER POLISH

4 credits.
Reading, conversation exercises, and grammar review. Enroll Info:
SLAVIC 112 or cons inst. Open to Fr
Requisites: None
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 2019
SLAVIC 208 - FOURTH SEMESTER POLISH
4 credits.
Reading, conversation exercises, and grammar review. Enroll Info: None
Requisites: None
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
SLAVIC 217 - THIRD SEMESTER CZECH
4 credits.
Continuation of SLAVIC 116. Focus on developing proficiency in
understanding, speaking, reading, and writing Czech. Enroll Info:
SLAVIC 116 or cons inst. Open to Fr
Requisites: None
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 2018

## SLAVIC 218 - FOURTH SEMESTER CZECH

4 credits.
Continuation of SLAVIC 217. Designed to develop proficiency in understanding, speaking, reading, and writing Czech. Enroll Info:
SLAVIC 217 or cons inst Open to Fr
Requisites: None
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 2019

## SLAVIC 231 - HISTORY AND ETHICS ON FILM: POLISH CINEMA

 3 creditsWhat 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 Enroll Info: None
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 242 - LITERATURES AND CULTURES OF EASTERN EUROPE 3 credits.

Introduction to the literature, culture and art of Eastern Europe. Enroll Info: None
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 245 - TOPICS IN SLAVIC LITERATURES
3 credits.
Exploration of various topics - periods, genres, individual writers, themes, problems, etc. in Russian and Eastern European literature. Enroll Info: None

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 2020

SLAVIC 251 - THIRD SEMESTER SERBO-CROATIAN
3 credits.
Continuation of 142. Focus on developing proficiency in speaking, understanding, reading and writing Serbo-Croation. Enroll Info:
SLAVIC 142 or cons inst. Open to Fr
Requisites: None
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 2019
SLAVIC 252 - FOURTH SEMESTER SERBO-CROATIAN
3 credits.
Continuation of 251 . Focus on developing proficiencey in speaking, understanding, reading and writing Serbo-Croatian. Enroll Info:
SLAVIC 251 or cons inst. Open to Fr
Requisites: None
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

## 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. Enroll Info: None
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 2019

## 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. Enroll Info: None
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 2020

## 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. Students will develop writing proficiency through compositions on a variety of topics. Enroll Info: None
Requisites: SLAVIC 118 or 204
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
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. Enroll Info: None
Requisites: SLAVIC 275
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 2020

## SLAVIC 277 - THIRD YEAR POLISH I

3 credits.
Review of Polish grammar. Reading, oral practice, and composition. Enroll Info: SLAVIC 208 or cons inst. Open to Fr
Requisites: None
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 2020
SLAVIC 278 - THIRD YEAR POLISH II
3 credits.
Review of Polish grammar. Reading, oral practice and composition. Enroll Info: None
Requisites: SLAVIC 208
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 2020

SLAVIC 279 - INTENSIVE THIRD YEAR RUSSIAN
8 credits.
Intensive course covering entire academic-year third-year Russian course in one semester. Improvement of Russian proficiency in all four skills, with an emphasis on reading and writing. Review of Russian grammar, development of complex syntax, vocabulary, and lengthier discourse. Enroll Info: SLAVIC 204 or equivalent
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: Summer 2016
SLAVIC 283 - RUSSIAN HONORS TUTORIAL FOR SLAVIC 203
1 credit.
Enroll Info: Con reg for hon cr in SLAVIC 203. Open to Fr
Requisites: Declared in honors program
Course Designation: 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 2012
SLAVIC 285 - SLAVIC CULTURE IN CONTEXT: AN HONORS COURSE 3 credits.

Topics will vary. This course is a 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. Enrollment priority given to freshmen/sophomore Honors students; other Honors students may enroll as space permits. No Slavic language required, although some knowledge of a non-English language is useful. Enroll Info: For honors students only, or by consent of the instructor
Requisites: Declared in 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: Fall 2020
SLAVIC 299 - DIRECTED STUDY
1 credit.
Enroll Info: None
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

## SLAVIC 301 - INTRODUCTION TO INTENSIVE POLISH

 3 credits.Intensive coverage of the structure of the Polish language. Rapid introduction to reading and speaking. Enroll Info: Jr st, open to Fr So with cons inst
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: Fall 2019
SLAVIC 302 - ZARYS HISTORII LITERATURY POLSKIEJ 3 credits.

An overview of the history of Polish literature. Enroll Info: SLAVIC 277, SLAVIC 301 or cons inst
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014
SLAVIC 304 - FOURTH SEMESTER INTENSIVE POLISH
4 credits.
Advanced grammar and reading: reading selections from various sources in Polish literature, history, and culture. Enroll Info: SLAVIC 301. Grad st or cons inst
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 2020

## 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. Enroll Info: SLAVIC 304. Grad st or cons inst
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 2020
SLAVIC 306 - SIXTH SEMESTER INTENSIVE POLISH
3 credits.
Continuation of 305 . Reading selections from twentieth century Polish
literature. Focus on intensive writing. Enroll Info: SLAVIC 305. Grad st or cons inst
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 2018

## 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. Enroll Info: SLAVIC 208 or equiv

## 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

## SLAVIC 308 - POLISH CULTURE AND AREA STUDIES ON STUDY ABROAD <br> 1-4 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enroll Info: SLAVIC 208 or equiv
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
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. Enroll Info: SLAVIC 204 or equiv
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
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. Enroll Info: 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: Fall 2001

## SLAVIC 315 - RUSSIAN LANGUAGE AND CULTURE I

3 credits.
Emphasizes speaking and listening skills, helping students to converse on different stylistic levels, with varying degrees of formality, according to the rules of Russian speech etiquette. Enroll Info: None
Requisites: SLAVIC 204
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## SLAVIC 316 - RUSSIAN LANGUAGE AND CULTURE II

3 credits.
Emphasizes speaking and listening skills, helping students to converse on different stylistic levels, with varying degrees of formality, according to the rules of Russian speech etiquette. Enroll Info: None
Requisites: SLAVIC 275
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020
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 Russianspeaking world. Enroll Info: None
Requisites: SLAVIC 276
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 2020
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. Enroll Info: None
Requisites: SLAVIC 321
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

SLAVIC 331 - FOURTH YEAR POLISH I
3 credits.
Extensive reading, discussion, composition, and grammar review. Enroll Info: SLAVIC 278 or cons inst. Open to Fr
Requisites: None
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 2019

SLAVIC 332 - FOURTH YEAR POLISH II
3 credits
Extensive reading, discussion, composition, and grammar review. Enroll Info: None
Requisites: SLAVIC 331
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 2018
SLAVIC 341 - FIRST SEMESTER INTENSIVE SERBO-CROATIAN
3 credits.
Rapid introduction to Serbo-Croatian grammar, reading, and speaking. Enroll Info: Grad st or cons inst
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: Fall 2018
SLAVIC 342 - UVOD U SRPSKU I HRVATSKU LITERATURU 3 credits.

This course introduces students to the fundamentals of Serbian and Croatian literature. Students learn how to speak, write and use the basic concepts of literary analysis: character, plot, setting, style, etc. Enroll Info: SLAVIC 341, Grad st or cons inst
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 2019
SLAVIC 350 - SPECIAL TOPICS IN RUSSIAN LANGUAGE, LITERATURE,
AND CULTURE
3 credits.

Enroll Info: SLAVIC 275 and 276 or cons inst
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 2013

## SLAVIC 351 - FIRST SEMESTER INTENSIVE CZECH

3 credits.
Rapid introduction to Czech grammar, reading, and speaking. Enroll Info:
Grad st or cons inst
Requisites: None
Course Designation: Frgn Lang - 1 st 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

## SLAVIC 352 - SECOND SEMESTER INTENSIVE CZECH

 3 credits.Rapid introduction to Czech grammar, reading, and speaking. Enroll Info:
SLAVIC 351. Grad st or cons inst
Requisites: None
Course Designation: 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 2018
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 at the Intermediate level. Enroll Info: None
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
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? Enroll Info: None
Requisites: LITTRANS 215
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

## 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. Enroll Info: None
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 2020

SLAVIC 405 - WOMEN IN RUSSIAN LITERATURE
3-4 credits.

## Enroll Info: SLAVIC 276 or equiv

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: No
Last Taught: Fall 2019
SLAVIC 420 - CHEKHOV
3-4 credits.
Enroll Info: SLAVIC 276 or equiv
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: No
Last Taught: Fall 2020
SLAVIC 421 - GOGOL
3-4 credits.

Enroll Info: SLAVIC 276 or equiv
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: No
Last Taught: Spring 2020
SLAVIC 422 - DOSTOEVSKY
3-4 credits.

Enroll Info: SLAVIC 276 or equiv
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: No
Last Taught: Fall 2018
SLAVIC 424 - TOLSTOY
3-4 credits.
Enroll Info: SLAVIC 276 or equiv
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: No
Last Taught: Spring 2019

SLAVIC 433 - HISTORY OF RUSSIAN CULTURE 3 credits.

First in a two-semester course sequence, this course 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. Enroll Info: None
Requisites: SLAVIC 322
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
SLAVIC 434 - CONTEMPORARY RUSSIAN CULTURE
3 credits.
Second in a two-semester course sequence, this course focuses on those topics in modern Russian cultural history that are most often discussed by Russians and serve as the basis for contemporary political and media discourse. Enroll Info: SLAVIC 322 or cons inst
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: Spring 2020
SLAVIC 440 - SOVIET LITERATURE
3-4 credits.
Enroll Info: SLAVIC 276 or equiv
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: 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. Enroll Info: SLAVIC 342, Grad st or cons inst 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: Fall 2017
SLAVIC 442 - FOURTH SEMESTER INTENSIVE SERBO-CROATIAN 3 credits.

Continuation of 403. Enroll Info: SLAVIC 441 or cons inst
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 2018

SLAVIC/FOLKLORE 444 - SLAVIC AND EAST EUROPEAN FOLKLORE 3 credits.

Oral traditional literature of Eastern Europe: ritual and lyric poetry, epic, and folktale. Enroll Info: None
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 - ISTORIJA SRPSKE I HRVATSKE 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. Enroll Info: SLAVIC 342 or equiv

## 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## SLAVIC 451 - THIRD SEMESTER INTENSIVE CZECH

3 credits.

Advanced grammar and reading: reading selections from various sources in Czech literature, history, and culture. Enroll Info: SLAVIC 352 or cons
inst
Requisites: None
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 2015

## SLAVIC 452 - FOURTH SEMESTER INTENSIVE CZECH

## 3 credits.

Continuation of 451, reading selections from twentieth century Czech
literature. Enroll Info: SLAVIC 451 or cons inst
Requisites: None
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 2011

## SLAVIC 454 - MODERNA SRPSKA I HRVATSKA LITERATURA

 3 credits.Continuation of SLAVIC 449, from 1919 until the present. Study of major twentieth-century writers. Readings in Serbo-Croatian. Enroll Info: SLAVIC 342 or equiv
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
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. Enroll Info: None
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

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 at the advanced level. Enroll Info: None
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

SLAVIC 470 - HISTORIA LITERATURY POLSKIEJ DO ROKU 1863
3 credits.
Intensive study of major writers such as Kochanowski, Sep Szarzynski, Krasicki, Mickiewicz, and Slowacki. Readings in Polish. Enroll Info:
SLAVIC 302
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2013

SLAVIC 472 - HISTORIA LITERATURY POLSKIEJ PO ROKU 1863
3 credits.
A comprehensive survey of Polish literature and its historical background from 1863 to the present. Readings in Polish. Enroll Info: SLAVIC 470
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
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. Enroll Info: None
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. Enroll Info: None
Requisites: SLAVIC 322
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

## SLAVIC 560 - CAPSTONE SEMINAR IN RUSSIAN LITERATURE AND CULTURE <br> 3 credits.

Conducted entirely in Russian. Designed for advanced students of Russian to study an aspect of Russian literature or culture in depth. Topics vary. Enroll Info: SLAVIC 322 and one 400-level course in Russian literature or culture; cons inst
Requisites: SLAVIC 322 and one 400-level SLAVIC course
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 2020

SLAVIC 681 - SENIOR HONORS THESIS
3 credits.

## Enroll Info: None

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: Summer 2012
SLAVIC 682 - SENIOR HONORS THESIS
3 credits.

Continuation of 681. Enroll Info: None
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
SLAVIC 699 - DIRECTED STUDY
1-6 credits.
Enroll Info: Jr or Sr st cons inst
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 2020
SLAVIC 701 - SURVEY OF OLD RUSSIAN LITERATURE
2 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
SLAVIC 702 - EIGHTEENTH-CENTURY RUSSIAN LITERATURE 2 credits.

Enroll Info: SLAVIC 321-322
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
SLAVIC 703 - FOUNDATIONS IN RUSSIAN ROMANTICISM
3 credits.
This course introduces students to Russian Romanticism and provides them with a solid foundation in both primary texts and secondary scholarship in the field. Enroll Info: None
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.

Enroll Info: None
Requisites: 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.
This course provides students with a deep knowledge of the masterworks of the 19th century and the broader literary, historical,political, intellectual and cultural contexts in which they arose and which they shaped. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
SLAVIC 708 - FOUNDATION IN RUSSIAN MODERNISM (~1890S-1930S) 3 credits.

This course introduces students to various trends in Russian Modernist literature from the 1890s through the 1930s. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
SLAVIC 709 - FOUNDATION IN SOVIET, EMIGRE, AND POST-SOVIET LITERATURE (~1930-PRESENT)
3 credits.
This course will cover, at the graduate level, the Soviet, Emigre, and Post-Soviet periods of Russian literature. In addition, it will engage 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## SLAVIC 755 - TOPICS IN SLAVIC LITERATURE

1-3 credits.
Enroll Info: None
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

## SLAVIC 799 - INDEPENDENT STUDY

1-6 credits

## Enroll Info: None

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
SLAVIC 800 - PROSEMINAR-SLAVIC LITERATURE AND CULTURE 1 credit.

The purpose of this course is three-fold: an introduction to the faculty in our department, an introduction to the Slavic field in general, and an introduction to research methods in Slavic. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## SLAVIC 801 - SLAVIC CRITICAL THEORY AND PRACTICE

3 credits
This course introduces students 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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## SLAVIC 802 - THE STRUCTURE OF RUSSIAN

2 credits.
This course provides advanced students with a theoretical and practical introduction to the linguistic structure of Contemporary Standard Russian. Enroll Info: SLAVIC 275, 276
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## SLAVIC 803 - INTRODUCTION TO OLD CHURCH SLAVONIC AND THE HISTORY OF RUSSIAN LITERARY LANGUAGE <br> 2 credits

This course introduces students with advanced competence in modern Russian to Old Church Slavonic (OCS) and its impact on the formation of Russian literary language. Enroll Info: SLAVIC 275, 276
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

SLAVIC 804 - METHODS OF TEACHING SLAVIC LANGUAGES
2 credits
Students will 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. Enroll Info: Graduate standing SLAVIC 321
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SLAVIC 820 - COLLEGE TEACHING OF RUSSIAN

1 credit.
This course is designed and required for current Slavic Department Russian-language Teaching Assistants and provides important professional development in course design, lesson planning, and assessment. Course participants work cooperatively to develop course activities and assessment instruments, and will learn how to identify and solve problems in the classroom. Enroll Info: Teaching assistant in Russian
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
SLAVIC 891 - APPRENTICESHIP IN TEACHING
1 credit.
Professional development in the pedagogy of literature, culture, and advanced language teaching. Enroll Info: None
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 for graduate students. Enroll Info: None
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.
Advanced level graduate seminar on topics related to Slavic literature and culture. Enroll Info: None
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

SLAVIC 991 - INDIVIDUAL RESEARCH-SLAVIC LITERATURE 1-12 credits.

Enroll Info: For Grads 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: Fall 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Prereq> Declared in the Doctor of Pharmacy program Requisites: Declared in Doctor of Pharmacy program Repeatable for Credit: No
Last Taught: Fall 2020

## S\&A PHM 414 - SOCIAL AND BEHAVIORAL ASPECTS OF PHARMACY PRACTICE <br> 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. Enroll Info: None
Requisites: S\&A PHM 411
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Doctor of Pharmacy program with second year standing
Repeatable for Credit: No
Last Taught: Spring 2020

## S\&A PHM/CLASSICS/HIST SCI/HISTORY/MED HIST 561 - GREEK AND ROMAN MEDICINE AND PHARMACY

3 credits.
Greek and Roman medicine and drug lore from the Pre-Socratics to Oribasius (c. 600 B.C. - A.D. 350), including the backgrounds of ancient Egyptian and Mesopotamian medicine. Enroll Info: None
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 2015

## S\&A PHM/HIST SCI/HISTORY/MED HIST/MEDIEVAL 562 - BYZANTINE MEDICINE AND PHARMACY <br> 3 credits.

Byzantine and Islamic medicine and drug lore from Oribasius to the beginnings of the Italian Renaissance (c. 350 - c. 1400 A.D.). Enroll Info: None
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: Spring 2015

## S\&A PHM 611 - PHARMACY LAW AND REGULATION

 2-3 creditsFederal and Wisconsin laws related to drug manufacture, drug distribution, drug use, and pharmacy practice. Enroll Info: None Requisites: S\&A PHM 514
Repeatable for Credit: No
Last Taught: Spring 2020

## S\&A PHM 622 - PROSEMINAR IN SOCIAL AND ADMINISTRATIVE PHARMACY <br> 1-3 credits.

Problems in pharmaceutical sociology, psychology, management, finance and economics, including: drug prescribing/use, distribution, and payment; patient care and pharmaceutical service delivery; pharmaceutical industry; and pharmaceutical policy and regulation. May be repeated. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2015

## S\&A PHM 652 - PHARMACIST COMMUNICATION: EDUCATIONAL AND BEHAVIORAL INTERVENTIONS <br> 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. Enroll Info: None
Requisites: S\&A PHM 411 and Declared in the Doctor of Pharmacy Program with third year standing
Repeatable for Credit: No
Last Taught: Spring 2020

## S\&A PHM 699 - ADVANCED INDEPENDENT STUDY

 0-3 credits.Directed study projects as arranged with a faculty member. Enroll Info: None
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 2020

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## S\&A PHM 702 - MIXED METHODS FOR HEALTH SCIENCES: PURPOSE, DESIGN AND APPROACH <br> 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. Enroll Info: None
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 2020

## S\&A PHM 703 - COMMUNITY ENGAGEMENT IN HEALTH SERVICES RESEARCH <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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 DI/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## S\&A PHM 711 - RESEARCH METHODS FOR PHARMACEUTICAL OUTCOMES AND POLICY RESEARCH <br> 3 credits.

Development of skills in the methods, techniques, and problems encountered in conducting evaluations of pharmaceutical services, programs, and policies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## S\&A PHM 713 - PHARMACEUTICL MARKETING AND POLICY

 3 credits.Marketing and policy aspects of prescription drugs from the perspective of the pharmaceutical industry; overview of the industry, the marketing mix, policies and regulations related to pharmaceuticals. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2016
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Declared in MS Pharmacy program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## S\&A PHM 911 - RESEARCH SEMINAR IN SOCIAL \& ADMINISTRATIVE PHARMACY <br> 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. Enroll Info: None
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. Enroll Info: None
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

## S\&A PHM 999 - ADVANCED INDEPENDENT STUDY

1-12 credits.

Directed study projects for graduate students as arranged with a faculty member. Enroll Info: None
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

## SOCIAL WORK (SOC WORK)

SOC WORK 100 - SO YOU WANT TO CHANGE THE WORLD?
3 credits.
Students talk about wanting to make a difference - to change the world in some way. This course, especially designed for freshmen, helps students examine their ideas and values related to making a difference, teaches them to think critically about the meaning and methods of changing the world, and challenges them to integrate thoughtful evidence with their values and beliefs about doing good in the world. With a focus on the profession of social work and other helping professions, the course will consider a variety of social problems, and investigate and critique various approaches to creating change to improve social problems. Enroll Info:

## None

Requisites: First year 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 2020

## 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. Enroll Info: None
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 2020

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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Freshman and 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. Enroll Info: None

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 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None Requisites: Sophomore standing and (SOC WORK 205, SOC 181, 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 2020

## SOC WORK 440 - PRACTICE I: FOUNDATIONS OF GENERALIST PRACTICE <br> 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. Enroll Info: None
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
1-3 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. Enroll Info: None
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: Fall 2020

## SOC WORK 442 - GENERALIST PRACTICE WITH COMMUNITIES AND

 ORGANIZATIONS1-2 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. Enroll Info: None
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: Fall 2020
SOC WORK 453 - ALCOHOL AND OTHER DRUG ABUSE
2-4 credits.
Presentation of social, legal, political, and ethical considerations surrounding the use and abuse of alcohol and psychotropic drugs in the U.S. Enroll Info: None

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: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2019
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. Enroll Info: None
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. Enroll Info: None
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 2020
SOC WORK 579 - SPECIAL TOPICS IN SOCIAL WORK
1 credit.
Intensive study of selected topics in the field of social work. Enroll Info: None
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: Spring 2016
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020

## SOC WORK 612 - PSYCHOPATHOLOGY IN GENERALIST SOCIAL WORK PRACTICE <br> 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. Enroll Info: None
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: Summer 2020
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. Enroll Info: None
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. Enroll Info: None
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/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. Enroll Info: None 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
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: None
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

2-3 credits.
Definition, incidence, and prevention of intellectual and other 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. Enroll Info: None
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 2020

## SOC WORK 646 - CHILD ABUSE AND NEGLECT

2-3 credits.
Examinations dimensions of child maltreatment: physical, emotional and sexual abuse of children, child neglect and exploitation. Enroll Info: None
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 2020

## SOC WORK 648 - END-OF-LIFE: IMPLICATIONS AND CHALLENGES FOR PRACTICE

1-3 credits
Focuses on social work practice with children, adolescents, adults and elders who have terminal illness, as well as their families. Enroll Info: Open to Social Welfare Majors, BSW and MSW students. Others with faculty consent.
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: Yes, unlimited number of completions
Last Taught: Spring 2020

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. Enroll Info: None
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: Summer 2020

## SOC WORK 656 - FAMILY PRACTICE IN FOSTER AND KINSHIP CARE

 2-3 creditsSocial welfare issues from national and local perspective, research, and foster care practice. Enroll Info: None
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 2020

## SOC WORK/CHICLA 657 - UNDERSTANDING LATINO FAMILIES AND COMMUNITIES <br> 3 credits.

Examines U.S. Latino families and communities, including social and economic conditions, cultural values, and issues of identity, race, gender, discrimination, acculturation and language. Gain knowledge of and direct experience with social work issues in Latino communities. Enroll Info: None

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 2012

SOC WORK/AMER IND 658 - AMERICAN INDIAN AFFAIRS
2-3 credits
Contemporary concerns and conditions of American Indians examined in historical, cultural and legal perspective. Enroll Info: None
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 2012

## 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. Enroll Info: None

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. Enroll Info: None
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. Enroll Info: None

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. Enroll Info: None
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. Enroll Info: None
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 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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: 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. Enroll Info: None
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: Yes, unlimited number of completions
Last Taught: Spring 2020
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. Enroll Info:

## None

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: Yes, unlimited number of completions
Last Taught: Fall 2020

## SOC WORK 676 - TOPICS IN CONTEMPORARY SOCIAL WELFARE

2-3 credits.
Topics will vary, reflecting emerging issues and trends in social work practice. Enroll Info: None
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: 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. Enroll Info: None
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: 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. Enroll Info: None
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

## 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. Enroll Info: None
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 2010
SOC WORK 691 - SENIOR THESIS
2 credits.
First of two semesters of undergraduate research leading to completion of thesis. Enroll Info: None
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 2003

## SOC WORK 692 - SENIOR THESIS

2 credits.
Second of two semesters of undergraduate research including
completion of a thesis. Enroll Info: None
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 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. Enroll Info: None
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 2020

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. Enroll Info: None
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: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC WORK 742 - ASSESSING AND TREATING CHILDREN AND ADOLESCENTS <br> 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC WORK 799 - INDEPENDENT STUDY

1-6 credits.
Independent study for MSW graduate students. Enroll Info: None
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
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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
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 2020
SOC WORK 817 - SOCIAL WORK PRACTICE IN SCHOOLS III 2-3 credits.

Practice in educational settings, coursework, and practicum supervision in school settings. Enroll Info: None
Requisites: Declared in Social Work MSW program or the Post-Bachelor's Personal \& Professional Development program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## SOC WORK 821 - SOCIAL WORK PRACTICE IN AGING AND MENTAL HEALTH <br> 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC WORK/LAW 822 - FAMILY LAW: MARRIAGE AND DIVORCE

 2-4 creditsMarriage and less formal spousal relationships, husband-wife relationships in on-going marriage; divorce and its economic and custody consequences; post-divorce relationships. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 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. Enroll Info: None

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 836 - MENTAL HEALTH POLICIES AND SERVICES

 2-3 creditsPrepares 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. Enroll Info: None

Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC WORK 841 - ADMINISTRATION IN SOCIAL WORK

2-3 credits.

Principally focused on developing management skills through case material and structured activities. Students go through the various sequential activities involved in conceptualizing and getting funding for a human service program, and in developing and managing a nonprofit organization. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

## SOC WORK 842 - CONSULTATION AND SUPERVISION IN SOCIAL WORK

2-3 credits.

Learning patterns, principles and methods of supervision and consultation. Enroll Info: None
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 852 - INFLUENCING POLITICAL SYSTEMS FOR SOCIAL

 CHANGE2 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. Enroll Info: None

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". Enroll Info: None
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 860 - RECENT DEVELOPMENTS IN SOCIAL WORK 1-3 credits.

Topics vary and focus on generalist practice. Enroll Info: None 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. Enroll Info: None
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. Enroll Info: None 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. Enroll Info: None 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 2020

SOC WORK 868 - RECENT DEVELOPMENTS IN SOCIAL WORK
2 credits.
Topics vary and focus on macro practice. Enroll Info: None
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 2013

## SOC WORK 869 - RECENT DEVELOPMENTS IN SOCIAL WORK

 2-3 credits.Topics vary and focus on advanced generalist practice. Enroll Info: None 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. Enroll Info: None 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 2020
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. Enroll Info: None Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC WORK/ED PSYCH/HDFS/NURSING 881 - CAPSTONE SEMINAR IN PREVENTION SCIENCE <br> 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. Enroll Info: None Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 who wish to submit a master's thesis or conduct independent research. Enroll Info: None
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

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. Enroll Info: None

Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Declared in Social Work MSW
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info: None
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. Enroll Info: None
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/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, metaanalysis and utilization. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

## SOC WORK 946 - FACULTY RESEARCH SEMINAR

1 credit.

Furthers the socialization of students to the Ph.D. program. Provides opportunities for faculty to discuss research interests and doctoral education. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
SOC WORK 948 - PROSEMINAR
1-3 credits.
Quantitative research methods seminars for research in the social and behavioral sciences. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
SOC WORK 949 - PROSEMINAR
1-3 credits.
Qualitative research methods seminars for research in the social and behavioral sciences. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2019
SOC WORK 990 - THESIS-RESEARCH
2-3 credits.
Dissertation preparation. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None 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 2020

## SOC 125 - AMERICAN SOCIETY: HOW IT REALLY WORKS

 3-4 creditsExplanation 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 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. Enroll Info: Open to Fr So only, until end of Fr reg period. Stdts may receive cr for only one of the following: SOC/LEGAL ST 131 or 431
Requisites: Not open to students who have taken SOC 431
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 2020

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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC/PSYCH 160 - HUMAN SEXUALITY: SOCIAL AND PSYCHOLOGICAL ISSUES <br> 3-4 credits.

Biological, psychological and sociological aspects of sexual relationships and behavior. The course 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. Enroll Info: Not open to students who have taken Soc/Psych 350
Requisites: Not open to students who have taken SOC/PSYCH 453 (or 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: Fall 2020

## 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. Enroll Info: None
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 2020
SOC 181 - HONORS INTRODUCTORY SEMINAR-THE SOCIOLOGICAL ENTERPRISE
3-4 credits.
An introduction to the paradigms, methods and substance of sociology. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Honors status. Satisfied Comm A requirement. Not taken Community \& Environmental SOC/C\&E SOC 210 or Community \& Environmental SOC/C\&E 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
Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Spring 2013

## SOC 198 - DIRECTED STUDY

1-3 credits.
Program of study devised by a student in collaboration with a faculty member. Graded on a $\mathrm{Cr} / \mathrm{N}$ basis. Open only to freshmen and sophomores. Enroll Info: Open to Fr So only. Graded on $\mathrm{Cr} / \mathrm{N}$ basis; requires written cons inst
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 2014
SOC 199 - DIRECTED STUDY
1-3 credits.
Program of study devised by a student in collaboration with a faculty member. Graded on a lettered basis. Open only to Fr and So. Enroll Info: Open to Fr So only. Graded on a lettered basis; requires written cons inst 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 2020

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. Enroll Info: None
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: Fall 2020

## SOC 205 - INTERCULTURAL DIALOGUES

3 credits.
Intercultural Dialogues (ICD) promotes diversity on campus by bringing students of different backgrounds together for discussion, projects, and gatherings outside of class. Enroll Info: Consent of Instructor
Requisites: Consent of instructor
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: No
Last Taught: Fall 2020

## SOC 206 - LEADERSHIP IN INTERCULTURAL DIALOGUES

3 credits
Leadership in Intercultural Dialogues is for student facilitators and apprentices of SOC 205, Intercultural Dialogues (ICD), which promotes diversity on campus by bringing students of different backgrounds together for discussion, projects, and gatherings outside of class. Students must complete SOC 205 to be eligible for this course. Enroll Info: None
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 2020
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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Satisfied Communications A requirement; not open to students who have taken SOC 181 or SOC/C\&E 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: Fall 2020

## 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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Not open to students who have taken SOC 181 or SOC/ C\&E 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: Fall 2020

SOC/C\&E SOC/GEN\&WS 215 - GENDER AND WORK IN RURAL AMERICA 3 credits.

Sociological dimensions of men's and women's work in nonmetropolitan areas of the United States. Examines gender divisions of "work" in its fullest sense: paid work in formal and informal economies, selfemployment, and nonmarket work such as housework. Enroll Info: None

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 2014

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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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: Fall 2015
SOC 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. Enroll Info: None
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 21 st century, including an exposure to region's contemporary literature. Enroll Info: 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 2020

## SOC/C\&E SOC 245 - TECHNOLOGY AND SOCIETY

3 credits.
Students are introduced to a wide range of work on technology, the social forces shaping its development, and social impacts of its adoption.
Students are encouraged to examine their assumptions about technology and its relationship to society. Enroll Info: None
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. Enroll Info: None
Requisites: None
Course Designation: Breadth - Social Science
Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None 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 <br> 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. Enroll Info:

## None

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: Summer 2020

## SOC/AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/POLI SCI 277 -

 AFRICA: AN INTRODUCTORY SURVEY4 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. Enroll Info: None

## 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: Fall 2020
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. Enroll Info: None
Requisites: 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: Fall 2020

## 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. Enroll Info: None
Requisites: SOC/C\&E SOC 140, 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 2020

## SOC/C\&E SOC 341 - LABOR IN GLOBAL FOOD SYSTEMS

3 credits.
Provides an 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. We will also learn about the ways that social movements are working to reshape commodity chains by promoting local production, fair trade, and labor justice.
Requisites: A C\&E SOC or SOC course
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 2020

SOC 351 - INTRODUCTION TO SURVEY METHODS FOR SOCIAL RESEARCH
3-4 credits.
Introduces the principles that underlie the uses of surveys for social research and experience in some of the basic techniques of survey research. Specific topics include the basic concepts of sampling and survey measurement. Labs and short reports are an integral part of the course. They illustrate how survey researchers apply the methods presented in the class and provide students the opportunity to practice applying the concepts and methods they learn every week. Techniques learned are relevant for many kinds of data collection and standardized measurement, such as experiments in social psychology or political polls Provides a substantial experience with practical research skills that are relevant in many academic and private sector contexts. Enroll Info: None
Requisites: Sophomore standing and (SOC/C\&E SOC 357 or concurrent enrollment in SOC/C\&E SOC 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 2018

## 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. Should be taken as early as possible by students considering a major in Sociology. Prior statistics not required. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Not open to students who have taken SOC 358
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

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; lectures and lab. Gateway to advanced courses in sociology. It is recommended that students take SOC/C\&E SOC 357 prior to taking this course. Enroll Info: Satisfied Quantitative Reasoning (QR) A requirement. Not open to students who have taken Soc 359
Requisites: Not open to students who have taken SOC 359
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: Fall 2020
SOC/C\&E SOC 361 - STATISTICS FOR SOCIOLOGISTS II
3 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 mulitcollinearity; associated diagnostics and corrections. Use of Stata and/or SAS for dataset creation and analysis. Lectures and lab. Enroll Info: Sophomore standing. Sophomore standing, and Soc/Community Environmental SOC/C\&E SOC 360 or equivalent Requisites: Sophomore standing and C\&E SOC 360, C\&E SOC 359, STAT 301, ECON 310, PSYCH 210, PSYCH 280, GEOG 360, POLI SCI 551, MATH/STAT 310, GEN BUS 303, OTM 300, or STAT 371
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 2020
SOC 362 - STATISTICS FOR SOCIOLOGISTS III
3 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. Lectures and lab. Enroll Info: None
Requisites: Junior standing, and Community \& Environmental SOC/ C\&E SOC 361 or equivalent or 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
Honors - Accelerated Honors (!)
Repeatable for Credit: No
Last Taught: Spring 2020

## SOC/C\&E SOC 365 - DATA MANAGEMENT FOR SOCIAL SCIENCE RESEARCH <br> 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. Enroll Info: None
Requisites: C\&E SOC 360, PSYCH 210, PSYCH 280, GEN BUS 303, STAT 301, ECON 310, MATH/STAT 310, GEOG 360, or POLI SCI 551
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 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. Matrix algebra recommended. Enroll Info: None
Requisites: Junior standing and SOC/C\&E SOC 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. Enroll Info: None Requisites: Junior standing, and SOC 375, MATH 320, MATH 340, MATH 341, or MATH 375, or consent of instructor
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/C\&E SOC/POP HLTH 380 - CONTEMPORARY POPULATION PROBLEMS FOR HONORS

3 credits.
This course is designed to identify, examine the nature and evaluate the evidence regarding key population problems affecting modern societies in the developed and developing world. The course emphasizes the development of demographic models as a tool to frame, define and investigate these problems. Examples of problems studied include: relations between population growth and environment, population growth and socioeconomic development, population and emergence of new diseases. Enroll Info: None
Requisites: Honors, and Community \& Environmental SOC/C\&E SOC 360 or equivalent or 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
Honors - Honors Only Courses (H)
Repeatable for Credit: No
Last Taught: Fall 2012
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. Enroll Info: None
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. Enroll Info: None
Requisites: Sophomore standing, SOC/C\&E SOC 357, and SOC/
C\&E SOC 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 2020
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. Enroll Info: None Requisites: Sophomore standing and (SOC WORK 205, SOC 181, 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 2020

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. Enroll Info: None
Requisites: SOC/LEGAL ST 131, GENS\&WS 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: Fall 2020
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. Enroll Info: None
Requisites: C\&E SOC 140, 210, 211, SOC 181, FOLKLORE/AFROAMER/
AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210,
CHICLA 230, POLI SCI/CHICLA 231, HISTORY/CHICLA/GEN\&WS 245,
LEGAL ST/SOC 131, or 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 2020
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. Enroll Info: None
Requisites: Sophomore standing and SOC/C\&E SOC 140, SOC 181, SOC/ C\&E SOC 210, SOC/C\&E SOC 211, or LEGAL ST/SOC 131
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 2020

## SOC/CHICLA/LEGAL ST 443 - IMMIGRATION, CRIME, AND ENFORCEMENT <br> 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. Enroll Info: None
Requisites: C\&E SOC 140, 210, 211, SOC 181, FOLKLORE/AFROAMER/ AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, POLI SCI/CHICLA 231, HISTORY/CHICLA/GEN\&WS 245, LEGAL ST/SOC 131, or 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 2020

## 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. Enroll Info: None Requisites: Sophomore standing and SOC/C\&E SOC 140, SOC 181, SOC/
C\&E SOC 210, SOC/C\&E SOC 211, or LEGAL ST/SOC 131
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: Summer 2020

## SOC/PSYCH 453 - HUMAN SEXUALITY

4 credits.
Provides an interdisciplinary introduction to biological, psychological, and sociological aspects of human sexuality. Enroll Info: None
Requisites: Sophomore standing; not open to students who have taken

## 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 2020

## SOC/PSYCH 456 - INTRODUCTORY SOCIAL PSYCHOLOGY

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. Enroll Info: None
Requisites: Sophomore standing and C\&E SOC 140, 210, 211, SOC 181,
PSYCH 201, 202, 281 or ANTHRO 100
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 2020

## SOC 460 - STUDY ABROAD IN DEMOGRAPHY AND ECOLOGY

1-6 credits.
This course provides a sociology area equivalency for demography and ecology courses taken on Madison study abroad programs that do not equate exactly to existing sociology courses. Enroll Info: Enrollment in a UW-Madison resident study abroad progm
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.

This course provides a sociology area equivalency for additional methods and statistics courses taken on Madison study abroad programs that do not equate exactly to existing sociology courses. Enroll Info: Enrollment in a UW-Madison resident study abroad progm
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.
This course provides a sociology area equivalency for additional theory courses taken on Madison study abroad programs that do not equate exactly to existing sociology courses. Enroll Info: Enrollment in a UWMadison resident study abroad progm
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.
This course provides a sociology area equivalency for deviant behavior courses taken on Madison study abroad programs that do not equate to existing sociology courses. Enroll Info: Enrollment in a UW-Madison resident study abroad progm
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.
This course provides a sociology area equivalency for social psychology courses taken on Madison study abroad programs that do not equate exactly to existing sociology courses. Enroll Info: Enrollment in a UW-

## Madison study abroad progm

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.
This course provides a sociology area equivalency for social organization courses taken on Madison study abroad programs that do not equate exactly to existing sociology courses. Enroll Info: Enrollment in a UWMadison resident study abroad progm
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/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. Enroll Info: None
Requisites: SOC 134, 170, 181, SOC/ASIAN AM 220, SOC/C\&E SOC 140, 210, 211, CHICLA 201, CHICLA 210, or POLI SCI/CHICLA 231; or graduate/professional 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
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. Gateway to advanced courses in sociology. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020

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. Enroll Info: SOC/ C\&ESOC 475
Requisites: SOC/C\&E SOC 475
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
SOC/GEN\&WS 477 - FEMINISM AND SOCIOLOGICAL THEORY 3 credits.

Reviews the ways that feminist critiques have reshaped social theory since 1960. Examines the ways that feminist theorists have reconceptualized classical sociological problems and how this has influenced the ways research in conducted. Enroll Info: None
Requisites: SOC/C\&E SOC 475, GEN\&WS 102, or GEN\&WS 200
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 2014
SOC 496 - TOPICS IN SOCIOLOGY
1-3 credits.
Intensive study of selected topics in sociology. Enroll Info: None
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 2020
SOC 497 - STUDY ABROAD IN SOCIOLOGY
1-6 credits.
A course carried with a UW-Madison Study Abroad Program that has no equivalent on this campus. Enroll Info: None
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

## SOC/C\&E SOC 532 - HEALTH CARE ISSUES FOR INDIVIDUALS, FAMILIES AND SOCIETY <br> 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2013
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020
SOC 535 - TALK AND SOCIAL INTERACTION
3 credits.
Focus on the systematic observation and analysis of face-toface 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. Enroll Info: Two Social Studies courses, or consent of instructor
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
Last Taught: Fall 2019

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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## SOC/C\&E SOC 541 - ENVIRONMENTAL STEWARDSHIP AND SOCIAL JUSTICE <br> 3 credits.

Application of sociological theory and analysis to environmental issues. Course examines the ways in which environmental stewardship and conflict are embedded within broader cultural, social, and political contexts. Enroll Info: None
Requisites: Any of these: Intro Soc course (SOC/C\&E SOC 140, 181, 210,
or 211), Forest and Wildlife Ecol 248, ENVIR ST 112, ENVIR ST 113, GEOG/ ENVIR ST 139, GEOG/ENVIR ST 337, GEOG/ENVIR ST 339, GEOG 101
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2018

## 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. Enroll Info:

## None

Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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/C\&E SOC 573 - COMMUNITY ORGANIZATION AND CHANGE 3 credits.

Examines theories of community change and different models of community organizing. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2019
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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
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. Enroll Info: None
Requisites: Junior standing and SOC/C\&E SOC 475, GEN\&WS 441, GEN\&WS 445, or GEN\&WS 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 creditsSocial, cultural and personality factors influencing community development, with reference to developing countries as well as contemporary rural communities; consideration of theoretical and operational issues. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020
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. Enroll Info: None
Requisites: Graduate standing, or Junior standing and 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: No
Last Taught: Spring 2017

SOC/C\&E SOC 623 - GENDER, SOCIETY, AND POLITICS
3 credits.
Examines the relationship between the social structures of gender (e.g., the domestic division of labor, sex-segregated occupational structures, gender ideologies, the social organization of sexuality) and political institutions, political activities, and state policies. Enroll Info: Junior standing. SOC/C\&E SOC 357 or a Gender Women's Studies course with a S, Y or Z breadth designation
Requisites: None
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 2014
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. Enroll Info: SOC/C\&E SOC 475
Requisites: SOC/C\&E SOC 475
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

## SOC 626 - SOCIAL MOVEMENTS

3 credits.
Role of social structure, authorities and movement participants, and leadership in the origins, mobilization, participation, strategy and tacts, and potential for success of social movements. Enroll Info: None
Requisites: Intro Soc course (SOC/C\&E SOC 140, 181, 210, or 211) or Asian American 220 or Community \& Environmental SOC/C\&E SOC 357 or equivalent
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
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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: Fall 2019

## 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. Enroll Info: Intro Soc course (SOC/C\&E SOC 140, 181, 210, or 211) and SOC/C\&E SOC 360
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
Last Taught: Fall 2019

## 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. Enroll Info: None
Requisites: SOC/C\&E SOC 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: Spring 2018
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. Enroll Info: None
Requisites: Junior standing and either SOC 441 or SOC/C\&E SOC 475, or Law student
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 2018

SOC 643 - SOCIOLOGY OF OCCUPATIONS AND PROFESSIONS 3 credits.

Introduction to theories and empirical studies on occupations and professions. Examination of the historical change, social structure, market competition, lifestyles, career path, workplace interaction, and other aspects of professional life from the late nineteenth century to the age of globalization. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2014

## 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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: Fall 2017

## 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 211)
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 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. Enroll Info: Intro Soc course (SOC/C\&E SOC $140,181,210$, or 211 ) or consent of instructor
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
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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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/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. Enroll Info: None Requisites: Completion of introductory Sociology course (SOC/ C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020

SOC/C\&E SOC 655 - MICROFOUNDATIONS OF ECONOMIC SOCIOLOGY 3 credits

A review and critique of economic theory from a sociological perspective. Reviews central concepts of contemporary microeconomics (e.g., rationality, exchange, strategic interaction, evolution, information), addressing critiques and alternatives offered by economic sociologists, economists, and other behavioral and social scientists. Enroll Info: Intro Soc (SOC/C\&E SOC 140, 181, 210, or 211 ), SOC/C\&E SOC 357, SOC/
C\&E SOC 360, Senior standing, and consent of instructor
Requisites: None
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 2014

## 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. Enroll Info: None
Requisites: SOC 170, C\&E 357, POP HLTH/C\&E SOC/SOC 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 Sustain - Sustainability
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. Enroll Info: None

Requisites: Junior standing and C\&E SOC 140, SOC 181, C\&E SOC 210,
C\&E SOC 211, SOC 125, HISTORY 102, or HISTORY 109
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

## SOC 674 - DEMOGRAPHIC TECHNIQUES

3 credits.
Methods of measurement for enumeration and registration data; construction of life tables; measures of fertility, nuptiality and migration; examination of census variables. Enroll Info: None
Requisites: Junior standing and SOC/C\&E SOC 357
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

## SOC/C\&E SOC 676 - APPLIED DEMOGRAPHY: PLANNING AND POLICY

 3 creditsIntroduction 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. Enroll Info: Intro Soc course (SOC/C\&E SOC 140, 181, 210, or 211) and SOC/C\&E SOC 357
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
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. Enroll Info: None
Requisites: Junior standing and C\&E SOC 140, SOC 181, C\&E SOC 210, or C\&E SOC 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: Fall 2015

## SOC 681 - SENIOR HONORS THESIS

3 credits.
Enroll Info: Honors status. Intro Soc course (SOC/C\&E SOC 140, 181, 210
or 211 ), SOC/C\&E SOC 357, SOC/C\&E SOC 360, SOC/C\&E SOC 475, and written consent of instructor
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

## SOC 682 - SENIOR HONORS THESIS

3 credits.
Continuation of 681 Enroll Info: Honors status, SOC 681, and written consent of instructor
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 2020

SOC 691 - SENIOR THESIS
2-3 credits.

Enroll Info: Intro Soc course (SOC/C\&E SOC 140, 181, 210 or 211), SOC/
C\&E SOC 357, SOC/C\&E SOC 360, SOC/C\&E SOC 475, Senior standing,
major in Soc, and consent of 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: No
Last Taught: Fall 2019

## SOC 692 - SENIOR THESIS

2-3 credits.

Continuation of 691 Enroll Info: SOC 691 and written consent of 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: 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. Lectures, readings, and discussions of the art and practice of research and the writing of research reports. For undergraduate and graduate students participating in the department's Concentration in Analysis and Research. Enroll Info: SOC/C\&E SOC 357, SOC/C\&E SOC 360, SOC/C\&E SOC 361, and CAR internship. Open only to students currently enrolled in CAR
Requisites: None
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 2020

## 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. Enroll Info: SOC/LEGAL ST 131 and Criminal Justice Certificate declaration
Requisites: None
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: Fall 2020
SOC 698 - DIRECTED STUDY
1-6 credits.

Graded on a Cr/N basis. Enroll Info: Junior standing and written consent of instructor. Graded on a Credit/No-Credit 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 2018
SOC 699 - DIRECTED STUDY
1-6 credits.
Graded on a lettered basis. Enroll Info: Junior standing and written consent of instructor. 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: Fall 2019

SOC 700 - INTRODUCTORY PROSEMINAR FOR GRADUATE STUDENTS 1 credit.

An introduction to current issues in sociology and its subfields. Enroll Info: Must be first-year Grad stdt 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 2020

## SOC/C\&E SOC/I SY E/N E 708 - SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS <br> 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. Enroll Info: None
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 <br> 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 crosslinguistic perspectives. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

## SOC/C\&E SOC 731 - INTERMEDIATE SOCIAL PSYCHOLOGY: GROUP AND COLLECTIVE PROCESSES <br> 3 credits.

Major social pychological theories and research that focus on interpersonal relations and group processes. Topics include: social interaction (influence, self-presentation, altruism, agression), groups (cohesion, conformity, leadership, problem-solving, decision making), intergroup relations (conflict, stereotypes), n-person games (dilemmas, coalition formation). Enroll Info: None
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.

This course is concerned with the 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. Enroll Info: None
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 748 - ENVIRONMENTAL SOCIOLOGY

3 credits.
Interaction between societies and their environments. Includes human ecology, environmental attitudes and individual actions, the social organization of environmental protection and exploitation and the effects of science, technology, and development. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
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; lectures and lab. Enroll Info: Grad st, SOC/C\&E SOC 357 and 362 or equiv
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC 751 - SURVEY METHODS FOR SOCIAL RESEARCH

3 credits.
Theoretical and practical issues involved in the design of surveys and their components. Students apply knowledge of survey research techniques to a specific and complete research project. Enroll Info: Grad st and SOC/C\&E SOC 361 or equiv
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 <br> 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 course material to a specific research problem through research reports and other exercises involving data analysis on a topic of the student's choice. Enroll Info: SOC 751 or permission of inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
SOC 753 - COMPARATIVE AND HISTORICAL METHODS IN SOCIOLOGY 3 credits.

Students learn about 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. Enroll Info: SOC/C\&E SOC 357 or 358/359 or undergrad methods sequence or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## SOC 754 - QUALITATIVE RESEARCH METHODS IN SOCIOLOGY

3 credits.
This course 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. Enroll Info: Grad st in Soc/CE Soc or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None
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. Enroll Info: SOC 674 or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## 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. Enroll Info:

## None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
SOC/POP HLTH 797 - INTRODUCTION TO EPIDEMIOLOGY
3 credits.
Lectures and discussions on design, implementation and interpretation of epidemiologic studies; emphasis on methodologic problems in the measurement of disease frequency, natural history and risk factors. Enroll Info: Grad st or healthcare professional program st or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SOC/FRENCH/GERMAN/HISTORY/POLI SCI 804 - INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR <br> 3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
SOC/C\&E SOC 875 - SPECIAL TOPICS
1-4 credits.
Enroll Info: None
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 901 - SEMINAR: TOPICS IN CURRENT SOCIOLOGY
2-3 credits.
Critical review of most recent research in sociology. Enroll Info: None
Requisites: 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/GEN\&WS 904 - SOCIOLOGICAL PERSPECTIVES ON GENDER <br> 3 credits.

Advanced topics in the analysis of gender relations in society. Enroll Info:

## None

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
SOC/ED POL 908 - SEMINAR-SOCIOLOGY OF EDUCATION
3 credits.
Selected topics. Enroll Info: None
Requisites: 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 910 - TEACHING SOCIOLOGY
3 credits.

Alternatives in course organization, instructional methods, and grading techniques with emphasis on teaching basic undergraduate courses. Enroll Info: None
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.
Enroll Info: None
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. Enroll Info: None
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 918 - SEMINAR IN COMPARATIVE SOCIOLOGY OF CONTEMPORARY CAPITALISM <br> 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. Background in basic concepts of economic sociology required. Enroll Info: Soc 651 or 652 or equiv
Requisites: 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 by faculty and students. Enroll Info: Soc 651 652, or cons inst
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 2011

SOC/C\&E SOC 922 - SEMINAR-RACE AND ETHNIC RELATIONS 3 credits.

Theoretical, methodological, and current research problems. Enroll Info: SOC 134 or 646 cons inst
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/C\&E SOC 923 - SEMINAR-SOCIAL STRATIFICATION
3 credits.
Enroll Info: None
Requisites: 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/URB R PL 924 - SEMINAR-POLITICAL SOCIOLOGY
3 credits.

Enroll Info: None
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/ANTHRO/C\&E SOC/ECON 925 - SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS <br> 2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world. Enroll Info: None Requisites: 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/C\&E SOC 929 - SEMINAR: CLASS ANALYSIS AND HISTORICAL

## CHANGE

3 credits.
Selected topics in Marxist theory and research. Enroll Info: None
Requisites: 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 930 - SEMINAR - SOCIO-LEGAL STUDIES
1-3 credits.
A sociological exploration of work in the interdisciplinary "law and society" tradition. Themes include compliance and resistance, dispute resolution, legal consciousness, legal pluralism, law and politics, the social dynamics of legal institutions, and the allocative and distributive impact of law. Enroll Info: None
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
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. Enroll Info: None
Requisites: 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 945 - SEMINAR-RURAL SOCIOLOGY
3 credits.

Theory and research in alternate semesters in rural aspects of population, stratification, social change, and groups and institutions. Enroll Info:
None
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/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## SOC 952 - SEMINAR-MATHEMATICAL AND STATISTICAL

APPLICATIONS IN SOCIOLOGY
3 credits.

Selected topics in measurement and model construction in social research. Enroll Info: None
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. Enroll Info: None
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/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. Enroll Info: None
Requisites: 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 961 - SEMINAR-ADVANCED SOCIAL PSYCHOLOGY 3 credits.

A selected research or theoretical area. Topic varies. Enroll Info: None
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

## SOC/C\&E SOC 965 - SEMINAR-RECENT DEVELOPMENTS IN SOCIAL PSYCHOLOGY

3 credits.
Current literature, emphasis on recent journal articles. Enroll Info: None Requisites: 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 <br> 3 credits.

Content varies. Enroll Info: None
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/C\&E SOC 972 - SEMINAR IN POPULATION AND DEVELOPMENT

3 credits.
Conceptual tools of sociology and demography will be used to examine current issues in population and development. The course readings will 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. We will focus on the impact of international population priorities on the current relationship between population and development, with particular attention to gender, poverty, and health. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: 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. Enroll Info: None

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/GEOG/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. Enroll Info: None
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 983 - RESEARCH: ECONOMIC SOCIOLOGY AND COMPARATIVE POLITICAL ECONOMY <br> 1-3 credits.

Presentation and discussion of on-going research by graduate students and faculty in the area of comparative political economy and economic sociology. Enroll Info: None
Requisites: 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 984 - RESEARCH: SOCIOLOGY OF GENDER TRAINEES

1-3 credits.
A weekly seminar for sociology graduate students interested in genderrelated research, focusing on presentations of student and faculty research projects and discussion of current debates within the sociology of gender. Enroll Info: None
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/C\&E SOC 985 - RESEARCH: COMMUNITY AND ENVIRONMENTAL SOCIOLOGY <br> 1-3 credits.

Critical analysis of recent theoretical and methodological issues through presentations of research in progress by faculty, graduate students, and visiting scholars. Enroll Info: None
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/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 their own work by faculty, graduate students, and visiting scholars. Enroll Info: None
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 990 - THESIS
1-12 credits.
Enroll Info: None
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
SOC 991 - RESEARCH : SOCIAL PSYCHOLOGY TRAINEES 1-3 credits.

Critical analysis of recent theoretical developments in social psychology and of research designed by participants. Enroll Info: None
Requisites: 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.
Enroll Info: Social organization trainee or cons inst
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/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. Enroll Info: None
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 994 - COLLOQUIUM IN CRITICAL SOCIOLOGY

1-3 credits.
Selected topics in critical sociology taught in intensive units three to four weeks in length. Two to three sessions per week. Enroll Info: None
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.

Enroll Info: Method trainee or cons inst
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/C\&E SOC 997 - RESEARCH: DEMOGRAPHY AND ECOLOGY TRAINEES <br> 1-3 credits

Enroll Info: Demography ecology trainee or cons inst
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 999 - READING AND RESEARCH IN SOCIOLOGY
1-12 credits.
Enroll Info: None
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

## 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. Enroll Info: None

Requisites: Consent of instructor
Course Designation: Sustain - Sustainability
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020

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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## SOIL SCI/ATM OCN 132 - EARTH'S WATER: NATURAL SCIENCE AND HUMAN USE <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: 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. Enroll Info: None
Requisites: Consent of instructor
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

SOIL SCI 301 - GENERAL SOIL SCIENCE
4 credits.
Physical chemical and biological properties of soils as they affect soil-plant-water relations, soil classification and suitability for agricultural and other uses. Enroll Info: None
Requisites: (CHEM 103, 109, or 115) and (MATH 112, 114, or 171) 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## SOIL SCI 305 - FIELD STUDY OF SOIL

1 credit.
Intensive in situ description and evaluation of soil morphology. Field trips required. Enroll Info: None
Requisites: 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 Sustain - Sustainability
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. Enroll Info: None Requisites: CHEM 104, 109, or 116, or graduate/professional standing Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## SOIL SCI 322 - PHYSICAL PRINCIPLES OF SOIL AND WATER MANAGEMENT <br> 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 152, or ZOOLOGY/
BIOLOGY 101 and 102, or 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

## 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. Enroll Info: None
Requisites: SOIL SCI/ENVIR ST/GEOG 230 or SOIL SCI 301 or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: (CHEM 103, 109, or 115 and 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: SOIL SCI/AGRONOMY/HORT 326 or graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
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. Enroll Info: None
Requisites: PL PATH/BOTANY 123, BOTANY/BIOLOGY 130, SOIL SCI/ ENVIR ST 101, SOILSCI 132, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, BOTANY 100, or AGRONONY 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## SOIL SCI/BSE/CIV ENGR 372 - ON-SITE WASTE WATER TREATMENT AND DISPERSAL <br> 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.

## Enroll Info: None

Requisites: CHEM 103, 109, or 115
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
SOIL SCI 375 - SPECIAL TOPICS
1-3 credits.
Special topics on contemporary issues relevant to soil science. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: Current enrollment in a UW-Madison study abroad program
Requisites: None
Course Designation: Sustain - Sustainability
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. Enroll Info: None
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: Spring 2019

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: CHEM 104, 109, or 116, or graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2013

## SOIL SCI/AN SCI/DY SCI/FOOD SCI 472 - ANIMAL AGRICULTURE AND GLOBAL SUSTAINABLE DEVELOPMENT <br> 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. Enroll Info: None
Requisites: None
Course Designation: Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: DY SCI/AN SCI/FOOD SCI/SOIL SCI 472
Course Designation: Sustain - Sustainability
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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: 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 (ZOOLOGY/ BIOLOGY 102, BOTANY/BIOLOGY 130, or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: (PHYSICS 103, 201, 207, or 247) and (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
Sustain - Sustainability
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. Enroll Info: 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 2019

## 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. Enroll Info: None
Requisites: Junior standing or 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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: Students should have completed at least one course in Botany, Agronomy, or Plant Sciences to feel comfortable with the course content.
Requisites: 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 2020

## 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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## SOIL SCI 601 - SPECIAL TOPICS IN SOIL SCIENCE

1-3 credits.
Topics in various areas of soil science. Enroll Info: None
Requisites: Junior standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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 <br> 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 or BOTANY/BIOLOGY 130 or 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 Sustain - Sustainability
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 oxidationreduction reactions in soils. Enroll Info: None
Requisites: CHEM 104, 109, or 116, or graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## SOIL SCI/CIV ENGR 623 - MICROBIOLOGY OF WATERBORNE PATHOGENS AND INDICATOR ORGANISMS <br> 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. Enroll Info: None
Requisites: CIV ENGR 322 or SOIL SCI/MICROBIO 523 or graduate/ professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
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. Enroll Info: None
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 Sustain - Sustainability
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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: 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 2006

## SOIL SCI 682 - SENIOR HONORS THESIS

2-4 credits.
Continuation of 681. Enroll Info: None
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 "handson" GIS experience. Enroll Info: None
Requisites: LAND ARC 211 or 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## SOIL SCI 875 - SPECIAL TOPICS

1-4 credits.
Special topics on contemporary issues relevant to soil science. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
SOIL SCI 990 - RESEARCH
1-12 credits.
Independent research and writing to complete dissertation requirements. Enroll Info: None
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

## SPANISH (SPANISH AND <br> 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. Enroll Info: None
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 2020
SPANISH 102 - SECOND SEMESTER SPANISH
4 credits.
Continuation of SPANISH 101. All basic language skills: listening comprehension, speaking, reading, and writing. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None

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. Enroll Info: None
Requisites: SPANISH 102 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: Fall 2020

## SPANISH 204 - FOURTH SEMESTER SPANISH

4 credits.
Intermediate-level language review, extensive Hispanic readings and culture, intensive written and oral activities. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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 SPANISH SPEAKERS

4 credits.
Reading and writing in Spanish, supported by the focused study of Spanish grammar and its oral application. Designed for heritage speakers of Spanish that already understand and speak some variety of Spanish. Enroll Info: None
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. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## SPANISH 226 - INTERMEDIATE LANGUAGE PRACTICE WITH EMPHASIS ON WRITING AND GRAMMAR

3 credits.
Intensive practice in reading, writing, and grammar. May be taken concurrently with SPANISH 223 or 224. Enroll Info: None
Requisites: SPANISH 204 or placement into SPANISH 226
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 2020

## 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. Enroll Info: None
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: Summer 2020
SPANISH 299 - DIRECTED STUDY
1-3 credits.
Directed study projects for freshmen and sophomores as arranged with a faculty member. Enroll Info: None
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 2018
SPANISH 311 - ADVANCED LANGUAGE PRACTICE
3 credits.
Advanced language practice, including intensive writing and work in pertinent areas of grammar and stylistics. Enroll Info: None
Requisites: SPANISH 226 or placement into 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: Fall 2020

## SPANISH 317 - SPANISH FOR NURSING

3 credits.
Covers professional oral and written Spanish communication skills for pre-nursing and nursing students to prepare for interactions with Spanish-speaking patients in a clinical setting. It will be conducted entirely in Spanish. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Spring 2020

## SPANISH 318 - SPANISH FOR PHARMACY

3 credits.
Teaches professional oral and written Spanish communication skills to Doctor of Pharmacy students, who are already exercising their training in the setting of a pharmacy and are likely to encounter Spanish-speaking patients. It will be conducted entirely in Spanish. Enroll Info: 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.). Enroll Info: None

## Requisites: SPANISH 311

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 2020

## SPANISH 320 - SPANISH PHONETICS

3 credits.
Practice course for improvement of pronunciation, and introduction to transcription and phonetic and phonemic analysis. Enroll Info: None 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 2020

## 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. Enroll Info: None
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: Spring 2020

## SPANISH 322 - SURVEY OF EARLY HISPANIC LITERATURE

 3 credits.Selected readings, discussions, and literary history of Spain and Spanish America through 1700. Enroll Info: None
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: Fall 2020

## SPANISH 323 - ADVANCED LANGUAGE PRACTICE WITH EMPHASIS ON EXPOSITORY WRITING <br> 3 credits.

Analysis of important questions of syntax, style, and idiomatic Spanish, with emphasis on expository writing. Enroll Info: None
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 to twentieth centuries. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None 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: Fall 2020

## SPANISH 326 - SURVEY OF SPANISH AMERICAN LITERATURE

3 credits.
Introduction to the study of Spanish American literature; reading, discussions, literary history. Eighteenth to twentieth centuries. Enroll Info: None
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: Fall 2020

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. Enroll Info: None
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 2019
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. Enroll Info: None
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 2020
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. Enroll Info: None
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: Summer 2020

## SPANISH 359 - SPANISH BUSINESS AREA STUDIES

3 credits.
Spanish business language, culture and practice within Spanish-speaking economic markets. Enroll Info: None
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 2020
SPANISH 361 - SPANISH CIVILIZATION
3 credits.
Cultural evolution from medieval period through twentieth century; conducted in Spanish; illustrated lectures. Enroll Info: None
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 2020

## SPANISH 363 - SPANISH AMERICAN CIVILIZATION

3 credits.
Cultural evolution of Spanish America from pre-Hispanic days through the present. Conducted in Spanish. Enroll Info: None
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 2020

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. Enroll Info: None
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
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 (through15th century): Poema de mio Cid, mester de juglaria, Libro de buen amor, mester de clerecia, El conde Lucanor, La Celestina, etc. Enroll Info: None
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 2020

## 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. Enroll Info: None
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. Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2020

## SPANISH 435 - CERVANTES

3 credits.

Development of Cervantes as a craftsman and thinker; linguistic and philosophical commentaries on Don Quixote and significant major works. Enroll Info: None
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/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. Enroll Info: None
Requisites: SPANISH 223 and 224
Course Designation: Breadth - Humanities
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## SPANISH 446 - TOPICS IN SPANISH LINGUISTICS

3 credits.
Advanced descriptive, historical, or applied topics in Spanish linguistics.
Enroll Info: None
Requisites: SPANISH 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: Fall 2020

## SPANISH 451 - LITERATURE OF THE EIGHTEENTH AND NINETEENTH CENTURIES <br> 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. Enroll Info: None
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: 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. Enroll Info: None
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 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.
Enroll Info: None
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: Fall 2020
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. Enroll Info: None
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 2019
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. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: None 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.
Concentrates on analyzing the representation of the Latino and Latina experience in the US, as well as the linguistic, cultural and formal singularity of their literature. Traces the development of Hispanic/ Latino literature, its trends, the incorporation of newer Latino and Latina migrant communities in the US, question how it is defined, and address various issues concerning its poetics and present state. It will explore the intersectionality of ethnicity, class, gender, migration, sexuality, and literary forms. Enroll Info: None
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 2020

## SPANISH 468 - TOPICS IN HISPANIC CULTURE

3 credits.
In-depth study of important cultural-historical issues concerning the Hispanic world. Enroll Info: None
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 2020
SPANISH/CHICLA 469 - TOPICS IN HISPANIC CULTURES IN THE U.S. 3 credits.

Focuses on the cultural evolution of Chicanos, Puerto Rican or CubanAmericans in relation to their countries of origin. Topics vary. Enroll Info: None
Requisites: SPANISH 361, 363, or 468; 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: Yes, unlimited number of completions
Last Taught: Fall 2019

## 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. Enroll Info: None
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: Spring 2017

## 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. Enroll Info: None
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: Fall 2019

## SPANISH 473 - STUDY ABROAD IN SPANISH LANGUAGE PRACTICE

1-4 credits.

Treatment of a topic in Spanish language in a course carried with a UWMadison resident study abroad program that has no equivalent on this campus. Enroll Info: 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 UWMadison resident study abroad program that has no equivalent on this campus. Enroll Info: 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 UWMadison resident study abroad program that has no equivalent on this campus. Enroll Info: 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 UWMadison resident study abroad program that has no equivalent on this campus. Enroll Info: 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. Enroll Info: None 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 2019

## 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. Enroll Info: None
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 2020

## SPANISH 479 - LATIN AMERICAN LITERATURE AND HUMAN RIGHTS

 3 creditsExplores 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. Enroll Info: None 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 2019

## SPANISH 480 - TOPICS IN LATIN AMERICAN PERFORMANCE/VISUAL

 STUDIES3 credits.
Latin American culture and politics through the study of selected aspects of performance and/or visual culture. Topics vary. Enroll Info: None
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: Yes, unlimited number of completions

## SPANISH 490 - RACE, RELIGION AND ETHNICITY IN THE AGE OF EMPIRE <br> 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 21 st century. Such works will guide us through this course, as will a wide array of visual resources from that era and our own. Enroll Info: None
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 2020

## SPANISH 501 - SURVEY OF SPANISH AMERICAN LITERATURE FROM THE DISCOVERY TO MODERNISMO <br> 3 credits.

Introduction to the major trends and genres of Spanish American Literature, from the Discovery to Modernism. Enroll Info: None
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 2015
SPANISH 502 - SURVEY OF SPANISH AMERICAN LITERATURE FROM MODERNISMO TO THE PRESENT
3 credits.
Introduction to major trends and genres of 20th and 21 st Spanish
American Literature. Enroll Info: None
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
SPANISH/MEDIEVAL 503 - SURVEY OF MEDIEVAL LITERATURE
3 credits.
Introduction to major 13th and 14th-century Castilian works. Enroll Info: None
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
SPANISH/MEDIEVAL 504 - SURVEY OF MEDIEVAL LITERATURE
3 credits.
Introduction to major 14th and 15th-century Castilian works. Enroll Info: None
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 2017

SPANISH 505 - ADVANCED SURVEY OF SPANISH LITERATURE 3 credits.

Advanced Survey of Golden Age Spanish Literature. Enroll Info: None
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 2016
SPANISH 506 - ADVANCED SURVEY OF SPANISH LITERATURE
3 credits.
Survey of Modern Peninsular Literature. Enroll Info: None
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 2017
SPANISH/MEDIEVAL 541 - OLD SPANISH
3 credits.
Historical Spanish phonology, morphology, and syntax, with application to theories of language variation and change. Enroll Info: None
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 2018
SPANISH 543 - SPANISH PHONOLOGY
3 credits.
Introduction to sound patterns of Spanish through the lenses of linear and non-linear generative phonology. Enroll Info: None
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 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. Enroll Info: None
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 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. Enroll Info: None
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.
Enroll Info: None
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 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. Enroll Info: None
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
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. Enroll Info: None
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.
Enroll Info: None
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. Enroll Info: None
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
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. Enroll Info: None
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

## SPANISH 682 - SENIOR HONORS THESIS

3 credits
Second semester independent study with the goal to complete a senior honors thesis in Spanish. Enroll Info: None
Requisites: SPANISH 681
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

## 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. Enroll Info: None
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. Enroll Info: None
Requisites: SPANISH 691
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. Enroll Info: None
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 2020

SPANISH 701 - TEXTUAL CRITICISM
3 credits.
Multiple alterities: religious affiliations, ethnicities, race, and gender in early modern America, Spain and the Mediterranean. Enroll Info: None
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. Enroll Info: None Requisites: 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. Enroll Info: None
Requisites: 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 visualaids, 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. Enroll Info: None
Requisites: Graduate Students Only
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None 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

## SPANISH 802 - SEMINAR-SPANISH AMERICAN LITERATURE

3 credits.

Seminar focusing on literature, literary criticism, culture or theory relevant to 20th and 21 st Spanish American Lit. Enroll Info: None
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

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). Enroll Info: None
Requisites: 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/FRENCH/ITALIAN/PORTUG 817 - ROMANCE PHILOLOGY 3 credits.

Seminar focusing on linguistic and philological analyses of the textual record in (Hispano-)Romance. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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). Enroll Info: None
Requisites: 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. Enroll Info: None
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

## SPANISH 850 - SEMINAR IN GOLDEN AGE DRAMA

3 credits.
Focuses on dramatic texts and theatrical traditions of 16th-and 17th century Spain. Enroll Info: None
Requisites: 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 <br> 3 credits.

In-depth reading of Cervantes' masterpiece, including a thorough study of its historical context and its place in the history of fiction. Enroll Info: None
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. Enroll Info: None

Requisites: 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 853 - SEMINAR IN GOLDEN AGE POETRY
3 credits.
In-depth study of poetic genres, movements or themes in 16th-and 17th century Spain. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2014
SPANISH 861 - SEMINAR-MODERN SPANISH LITERATURE 3 credits.

Literary, cultural, or theoretical topics relevant to Modern Peninsular Literature. Enroll Info: None
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

## 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. Enroll Info: None

Requisites: 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. Enroll Info: None
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

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. Enroll Info: None
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

## SPANISH 990 - THESIS

1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## STATISTICS (STAT)

STAT 240 - INTRODUCTION TO DATA MODELING I
4 credits.
Introduces students to 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. Enroll Info: None
Requisites: Satisfied Quantitative Reasoning (QR) A requirement
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: Fall 2020

## 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. Enroll Info: None
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\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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. Enroll Info: None
Requisites: STAT 301, 302, 312, 324, 371, MATH/STAT 310, ECON 310, GEN BUS $303,304,306,307$, PSYCH 210 , or SOC/C\&E SOC 360 , or graduate/professsional standing or member of the Statistics Visiting International program
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 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 234 or concurrent enrollment; not open to students with credit for 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: Fall 2020

## STAT/MATH 310 - INTRODUCTION TO PROBABILITY AND MATHEMATICAL STATISTICS II <br> 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. Enroll Info: None
Requisites: (STAT/MATH 309, STAT 311, or STAT/MATH 431) and (STAT 224, 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: Fall 2020

## 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. Enroll Info: None
Requisites: MATH 234, 376, or concurrent enrollment or graduate/ professsional standing. Not open to students with credit for STAT/ MATH 309 or 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: Fall 2020

## 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. Enroll Info: None
Requisites: STAT/MATH 309, STAT 311, STAT/MATH 431, 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: Fall 2020

## 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 twosample problems. Linear regression, model checking, and inference. Analysis of variance and basic ideas in experimental design. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None Requisites: STAT 301, 302, 324, or 371, or graduate/professsional standing or member of the Statistics Visiting International program
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. Enroll Info: None
Requisites: (STAT 301, 302, 312, 324, or 371) and (STAT 303 or concurrent enrollment, or STAT 327 prior to Fall 2019)
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: Fall 2020

## STAT 340 - INTRODUCTION TO DATA MODELING II

4 credits.
Teaches students 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. Students use an integrated statistical computing environment to explore and analyze data, develop models, make inferences, and communicate results in a reproducible manner through a project-oriented approach to learning. Enroll Info: None
Requisites: (MATH 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 2020

## 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. Enroll Info: None
Requisites: STAT 333, 340, graduate/professional standing, or member of the Statistics Visiting International Scholars 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: Fall 2020

## 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. Enroll Info: None
Requisites: STAT 333, 340, graduate/professional standing, or member of the Statistics Visiting International Scholars 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 2020

## 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. Enroll Info: None
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 <br> 3 credits.

Introduction to modern statistical practice in the life sciences. Topics include: exploratory data analysis, probability and random variables; onesample 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. Enroll Info: None
Requisites: (MATH 112 and 113), 114, 171, or 211 . Not open to students who have 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: Fall 2020

## STAT 411 - AN INTRODUCTION TO SAMPLE SURVEY THEORY AND METHODS <br> 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. Enroll Info: None
Requisites: STAT 333, 340, graduate/professional standing, or member of the Statistics Visiting International Scholars program
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. Enroll Info: None
Requisites: STAT 333, 340, graduate/professional standing, or member of the Statistics Visiting International Scholars 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 2020

## 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. Enroll Info: None
Requisites: STAT 240, 301, 302, 312, 324, 371, or 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: Fall 2020

## STAT/MATH 431 - INTRODUCTION TO THE THEORY OF PROBABILITY

 3 creditsTopics 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: (STAT 333 or 340 ) and (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Statistics Visiting International program
Course Designation: Breadth - Natural Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: STAT 333, 340, graduate/professional standing, or member of the Statistics Visiting International Scholars program
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

## 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. Enroll Info: None
Requisites: MATH 320, 321, 340, 341, graduate/professional standing, or member of the Statistics Visiting International Scholars 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: Fall 2020

## STAT 453 - INTRODUCTION TO DEEP LEARNING AND GENERATIVE MODELS <br> 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. Enroll Info: None
Requisites: MATH 320, 321, 340, 341, graduate/professional standing, or member of the Statistics Visiting International Scholars 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 2020

## 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. Enroll Info: None Requisites: (STAT 333 or 340) and (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Statistics 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: Fall 2019

## 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 BlackScholes model. The main focus of the course will be on statistical inference, data analysis and risk management regarding these models. Enroll Info: None
Requisites: (STAT 333 or 340 or ECON 410) and (MATH/STAT 309,
STAT 311, or MATH/STAT 431) or graduate/professsional 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
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). Enroll Info: None
Requisites: (STAT/MATH 310 and STAT 333) 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: Fall 2020

## STAT/COMP SCI/MATH 475 - INTRODUCTION TO COMBINATORICS

 3 credits.Problems of enumeration, distribution, and arrangement. Inclusionexclusion 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. Enroll Info: None
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: Fall 2020

## STAT 479 - SPECIAL TOPICS IN STATISTICS

1-3 credits.
Special topics of interest in undergraduate students. Enroll Info: None 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: Fall 2020

## STAT/COMP SCI/I SY E/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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing. Not open to students with credit for STAT 511 or 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 2020

## STAT/B M I 542 - INTRODUCTION TO CLINICAL TRIALS

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. Enroll Info: None
Requisites: 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 2020
STAT/B M I 546 - PRACTICUM IN CLINICAL TRIAL DATA ANALYSIS AND INTERPRETATION
3 credits.

Provides practice in analysis and interpretation of existing datasets from national and international clinical trials in a variety of diseases. Students will develop a research question, review clinical protocols, and analyze available data to prepare a report. Enroll Info: None
Requisites: (B M I/STAT 541 or HORT/F\&W ECOL/STAT 572) and (B M I/ STAT 542 or B M I/STAT 641)
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 2015

## STAT/F\&W ECOL/HORT 571 - STATISTICAL METHODS FOR BIOSCIENCE I <br> 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. Enroll Info: None
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 2020

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. Enroll Info: None Requisites: (STAT 333 or 340) and M E/STAT 424; or HORT/F\&W ECOL/ STAT 572
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

## 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. Enroll Info: None
Requisites: (STAT 333 or 340 ) and M E/STAT 424; or 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. Enroll Info: None Requisites: Graduate/professsional 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: Fall 2020

## 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. Enroll Info: None
Requisites: STAT 601
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: 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: Fall 2020

## 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. Enroll Info: None
Requisites: Graduate/professsional 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 2020

STAT 610 - INTRODUCTION TO STATISTICAL INFERENCE 4 credits.

Conditioning, distribution theory, approximation to distributions, modes of convergence, limit theorems, statistical models, parameter estimation, comparision of estimators, confidence sets, theory of hypothesis tests, introduction to Bayesian inference and nonparametric estimation. Enroll Info: None
Requisites: Graduate/professsional 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: Fall 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: Graduate/professsional 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 2020

## 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. Enroll Info: 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: Fall 2020

## STAT/I SY E/MATH/OTM 632 - INTRODUCTION TO STOCHASTIC PROCESSES <br> 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. Enroll Info: None
Requisites: (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: Fall 2020
STAT/B M I 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. Enroll Info: None
Requisites: 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: Spring 2020
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. Enroll Info: None
Requisites: 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: Fall 2020

## STAT 679 - SPECIAL TOPICS IN STATISTICS

1-3 credits.

Special topics in statistics at the master's level. Subject matter varies. Enroll Info: None
Requisites: Graduate/professsional 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 2020

## STAT 681 - SENIOR HONORS THESIS

3 credits.
Mentored individual study for students writing honors thesis, as arranged with a faculty member. Enroll Info: None
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
STAT 682 - SENIOR HONORS THESIS
3 credits.

Mentored individual study for students writing honors thesis, as arranged with a faculty member. Enroll Info: None
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 2020

## STAT 698 - DIRECTED STUDY

1-6 credits.

Directed study projects as arranged with a faculty member. Enroll Info: None
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 2020
STAT 699 - DIRECTED STUDY
1-6 credits.

Directed study projects as arranged with a faculty member. Enroll Info: None
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 2020

## STAT 701 - APPLIED TIME SERIES ANALYSIS, FORECASTING AND CONTROL I <br> 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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: STAT/MATH 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
STAT/COMP SCI/I SY E/MATH 726 - NONLINEAR OPTIMIZATION I
3 credits.

Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasiNewton 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. Enroll Info: 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: Fall 2020

## STAT 732 - LARGE SAMPLE THEORY OF STATISTICAL INFERENCE

 3 creditsStochastic 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. Enroll Info: None
Requisites: STAT 610 or 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. Enroll Info: 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 PreMasters 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None

Requisites: STAT 610 or MATH/STAT 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019

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-leaarning methods. Extensions to piecewise linear and non-least squares regression models. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

## 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: STAT 609 or STAT/MATH 709
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None

## 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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. Enroll Info: None
Requisites: STAT 610 or 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. Enroll Info: None
Requisites: STAT 610 or 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. Enroll Info: None
Requisites: Graduate/professional standing or member of the PreMasters 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 2020

## 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. Enroll Info: None
Requisites: STAT 610 or 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; degees of freedom for signal and the bias-variance tradeoff; Bayesian confidence intervals; model selection. Enroll Info: None
Requisites: STAT 610 or 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 <br> 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. Enroll Info: None

Requisites: STAT 610 or 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## STAT 850 - THEORY AND APPLICATION OF REGRESSION AND ANALYSIS OF VARIANCE II <br> 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. Enroll Info: None
Requisites: STAT 849
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## STAT 860 - ESTIMATION OF FUNCTIONS FROM DATA

3 credits.
Statistical and appoximation 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. Enroll Info: None
Requisites: STAT 610 or 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. Enroll Info: None
Requisites: EC 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 2020
STAT/B M I 877 - STATISTICAL METHODS FOR MOLECULAR BIOLOGY 3 credits.

Develop statistical problems in gene mapping, high throughputomic 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. Enroll Info: None
Requisites: STAT 610 or MATH/STAT 710
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
STAT 990 - RESEARCH
1-12 credits.
Independent research and writing for graduate students under the supervision of a faculty member. Enroll Info: None
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
STAT 992 - SEMINAR
1-3 credits.
Special topics in statistics at the graduate level. Subject matter varies Enroll Info: None

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
STAT 998 - STATISTICAL CONSULTING
3 credits.
Consulting apprenticeship. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## SURGERY (SURGERY)

## SURGERY 699 - INDEPENDENT STUDY

0-5 credits.
Independent study projects as arranged with faculty or instructional staff. Enroll Info: None
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 2020

## SURGERY 910 - INDEPENDENT READING AND RESEARCH IN SURGERY

 2-8 creditsIndependent 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812, and 813
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812, and 813
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No

## SURGERY 919 - INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE IN SURGERY <br> 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. Enroll Info: None
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

## SURGERY 920 - GENERAL SURGERY ELECTIVE

2-4 credits.

Direct supervision by General Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisorstudent 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. Enroll Info: None 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

## 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. Enroll Info: None
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: Fall 2020

## SURGERY 939 - ADULT ORTHOPEDICS FOR THE FUTURE ORTHOPEDIST ELECTIVE <br> 4 credits.

Direct supervision by orthopedic Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisorstudent 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. Enroll Info: None
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

## SURGERY 940 - ADULT ORTHOPEDICS FOR THE NON-ORTHOPEDIST ELECTIVE <br> 2-4 credits.

Direct supervision by community orthopedic senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisorstudent 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. Enroll Info: None 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

## SURGERY 944 - UPPER EXTREMITY ORTHOPAEDIC CLERKSHIPMARSHFIELD CLINIC <br> 2-12 credits.

Clinical elective for fourth year medical students. Enroll Info: None
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

## SURGERY 948 - OTOLARYNGOLOGY ELECTIVE

2-4 credits
Direct supervision by Otolaryngology senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisorstudent 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. Enroll Info: None 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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## 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. Enroll Info: None
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

## SURGERY 962 - SURGICAL CRITICAL CARE ELECTIVE

2-4 credits.
Direct supervision by General Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisorstudent 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. Enroll Info: None 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

## 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. Enroll Info: None
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

## 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. Enroll Info: None

## 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

## SURGERY 973 - OPTIMIZING VALUE, QUALITY AND SAFETY IN HEALTHCARE <br> 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. Enroll Info: None
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: Fall 2020

## 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. Enroll Info: None
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 2020

## 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 populationlevel 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. Enroll Info: None
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 2020

## 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 fue 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. Enroll Info: None 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 2020

## 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). Enroll Info: None

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-inano, 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. Enroll Info: None
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

## 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. Enroll Info: None
Requisites: MED SCI-M 810, 811, 812 and 813
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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## SURG SCI 542 - VETERINARY OPHTHALMOLOGY

2 credits.
Provides basic instruction in the application of ophthalmic diagnostics and therapeutics to small and large domestic animals. Professional students should gain sufficient skills and knowledge to accurately diagnose, treat, prognose or refer domestic animals with common ophthalmic disorders. Enroll Info: Vet Med st or cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020
SURG SCI 543 - FUNDAMENTALS OF ANESTHESIOLOGY I 1 credit.

A comprehensive course in Veterinary Anesthesiology covering basic principles of sedation, pain physiology, anesthetic drugs, anesthetic monitoring, and the practical considerations in performing anesthesia on healthy veterinary species. Lectures will be case-based and interactive where appropriate. Utilization of blended learning modules will be employed where appropriate. Enroll Info: Successful completion of semesters 1-3 of the DVM curriculum
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No

## SURG SCI 544 - SURGERY FUNDAMENTALS

2 credits.
Introductory material on the scientific foundations of surgery. Prepares student for clinical course work in veterinary surgery and medicine. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020

## SURG SCI 545 - FUNDAMENTALS OF ANESTHESIOLOGY II

1 credit.
Focus on anesthetic management of common veterinary species with concurrent medical disease. Lectures cover advanced pain management principles and techniques, anesthesia for exotic animal species, and breed considerations in anesthesia. Lectures will be case-based and interactive where appropriate. Enroll Info: Successful completion of semesters 1-5 of the DVM curriculum
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No

SURG SCI 547 - FUNDAMENTALS OF ANESTHESIOLOGY 2 credits.

This is a comprehensive course in Veterinary Anesthesiology. The first half of the course ( $\sim 15$ lectures) will cover basic principles of sedation, pain physiology, anesthetic drugs, anesthetic monitoring, and the practical considerations in performing anesthesia on healthy veterinary species. The second half of the course ( $\sim 15$ lectures) will focus on anesthetic management of common veterinary species with concurrent medical disease. Lectures will also be included that cover advanced pain management principles and techniques, anesthesia for exotic animal species, and breed considerations in anesthesia. Lectures will be case-based and interactive where appropriate. Enroll Info: Successful completion of semesters 1-3 of the DVM curriculum

## Requisites: None

Repeatable for Credit: No
Last Taught: Spring 2019

## SURG SCI/F\&W ECOL 548 - DISEASES OF WILDLIFE

3 credits.
This course is designed to provide students with an overview of the issues involved across a wide range of wildlife diseases, presented within the context of ecosystem health or "one health". The primary focus of the lectures will be on the biological, epidemiological, clinical, public health and, in some cases, sociopolitical ramifications of wildlife diseases. The course will cover 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 students with 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. Enroll Info: Junior standing

## 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 2020

## 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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020

## SURG SCI 631 - LARGE ANIMAL SURGERY: ORTHOPEDIC AND SOFT TISSUE <br> 3 credits.

Instruction will be provided in examination techniques, diagnostic aids and surgical procedures relevant to the gastrointestinal, integumentory, musculoskeletal, respiratory and genitourinary systems of the equine and food animal species. Enroll Info: Vet Med standing or consent of instructor
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020
SURG SCI 632 - SMALL ANIMAL SURGERY LABORATORY
2 credits
The basic skills necessary for student participation in the surgical management of small animals in the Veterinary Medical Teaching Hospital are presented. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020

## SURG SCI 634 - SMALL ANIMAL ANESTHESIA LABORATORY

 1 credit.In this laboratory the students will apply principles and techniques of veterinary anesthesiology to common companion animals. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
SURG SCI 638 - VETERINARY DIAGNOSTIC IMAGING
2 credits.
Veterinary radiology principles, physical background and diagnostic techniques will be taught and emphasized in laboratory exercises. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
SURG SCI 642 - LARGE ANIMAL SURGERY: CLINICAL ROTATION 2 credits

Final year veterinary students will be assigned to the Large Animal Surgery Service. They will be taught the admission, examination, preoperative management, surgical procedures and postoperative management of large animals presented to the Veterinary Medical Teaching Hospital. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

SURG SCI 644 - CLINICS-SMALL ANIMAL ORTHOPEDIC SURGERY 2 credits.

Fourth year veterinary student rotation through orthopedic and neurosurgical clinics and surgery. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## SURG SCI 645 - SENIOR ROTATION IN SMALL ANIMAL GENERAL SURGERY <br> 2 credits.

A practical course in the diagnosis and treatment of general surgical diseases of small animal species. Enroll Info: None Requisites: Declared in Veterinary Medicine program Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## SURG SCI 646 - VETERINARY ANESTHESIOLOGY-CLINICAL ROTATION

 2 credits.Students will learn clinical anesthesiology techniques including preanesthetic evaluation, induction procedures, intraoperative care, and recovery management of domestic livestock and pets. Critical patient care will be taught. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

SURG SCI 647 - RADIOLOGY CLINICS
2 credits.
Clinical clerkship in the Veterinary Medical Teaching Hospital half days over a two week period. Provides exercises in technical and interpretive diagnostic radiology. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Fall 2020
SURG SCI 675 - SPECIAL TOPICS
1-5 credits.
Topics vary. Enroll Info: Cons inst
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
SURG SCI 676 - SPECIAL SPECIES HEALTH
2 credits.
Basic principles of avian, reptile and laboratory animal medicine and surgery. Enroll Info: 3rd yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2020
SURG SCI 677 - VETERINARY DENTISTRY ELECTIVE
1 credit.
Introduction to veterinary dentistry principles and practice. Enroll Info: 3rd yr Vet Med st
Requisites: Declared in Veterinary Medicine program
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
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 2020

## SURG SCI 741 - CLINICAL OPHTHALMOLOGY ROTATION

2 credits.

Course 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. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Fall 2020

## SURG SCI 743 - ADVANCED ANESTHESIOLOGY/CRITICAL CARE MEDICINE <br> 2 credits.

This course will provide advanced training in the areas of small and large animal anesthesia and/or critical care medicine. The student may elect a general rotation or one particular area of study. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
SURG SCI 744 - RESTRAINT AND ANESTHESIA OF EXOTIC ANIMALS 2 credits.

Advanced anesthesiology techniques for animals in zoological collections, wildlife parks, and non-domestic settings will be taught in this course. Emphasis on pharmacology and physiology will be stressed. Enroll Info: None
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
SURG SCI 746 - FOOD ANIMAL SURGERY
2 credits.
The course will provide didactic and surgical experience in the major, common surgical diseases of cattle and pigs. Enroll Info: None Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: 4th yr Vet Med st
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

SURG SCI 750 - SMALL ANIMAL ULTRASOUND ELECTIVE 1 credit.

Course will introduce student to hands-on ultrasound imaging and expand on selected portions of ultrasound physics, literature and problem-based case studies. Enroll Info: SURG SCI 647
Requisites: Declared in Veterinary Medicine program
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

## SURG SCI 775 - EXTERNSHIP

1-24 credits.
This course is an elective for fourth year veterinary medical students which offers faculty coordinated experience in the veterinary medical profession outside the School. Enroll Info: Vet Med st or cons inst
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

## SURG SCI 812 - RESEARCH ETHICS AND CAREER DEVELOPMENT

 2 credits.This course 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## THEATRE AND DRAMA (THEATRE)

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. Enroll Info: None
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
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
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 2020
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. Enroll Info: None
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: 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. Enroll Info: None
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 2020
THEATRE 199 - DIRECTED STUDY
1-3 credits.
Collaborate with instructor for personalized curriculum. Enroll Info: None 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 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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: None
Course Designation: Level - Elementary
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## THEATRE/DANCE 218 - AFRICAN DANCE PERFORMANCE

2 credits.
Technique, practice and performance of complex African and Africanbased 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. Enroll Info: None
Requisites: DANCE 118
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 2017
THEATRE 219 - UNDERGRADUATE TOPICS INTHEATRE 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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: THEATRE 160
Repeatable for Credit: No
Last Taught: Fall 2020

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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll

## Info: None

Requisites: THEATRE/ENGL 120
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
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. Enroll

## Info: None

Requisites: None
Repeatable for Credit: No
Last Taught: Fall 2019
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. Enroll Info: None
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 2019
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. Enroll Info: None
Requisites: THEATRE 150
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## THEATRE/DANCE 259 - COLLABORATIVE ARTS PERFORMANCE LAB:

 DEVISING COLLABORATIVE PERFORMANCE THROUGH HIP HOP ARTS 1-2 creditsWork 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. Enroll Info: None
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 2020

## 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. Enroll Info: None
Requisites: None
Repeatable for Credit: No
Last Taught: Spring 2020
THEATRE 263 - FUNDAMENTALS OF COSTUMES TECHNOLOGY 3-4 credits

Theory and techniques of costume construction for theatrical production. Enroll Info: 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: Yes, unlimited number of completions
Last Taught: Fall 2012
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. Enroll Info: None
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: Fall 2017
THEATRE 270 - FUNDAMENTALS OF STAGECRAFT
3-4 credits.
Theory and techniques of stagecraft for theatrical production. Enroll Info: 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 2019

## THEATRE 298 - DIRECTED STUDY

1-3 credits.
Collaborate with instructor for personalized curriculum. Enroll Info: None
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. Enroll Info: None 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 2016
THEATRE/DANCE/FOLKLORE 321 - JAVANESE PERFORMANCE
2 credits.
Technique and practice of classical Javanese dance in its musical, historical and cultural contexts. Enroll Info: None
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. Enroll Info: None
Requisites: 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. Enroll Info: None
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 AfricanAmerican 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. Enroll Info: None
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 2020
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. Enroll Info: None
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 2020
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. Enroll Info: None
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 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. Enroll Info: None
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 2020

THEATRE 350 - ACTING REALISM
3 credits.
Intensive scene study from the major works of selected modern playwrights, concentrating on realism. Enroll Info: None
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 2020

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. Enroll Info: None
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 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. Enroll Info: None
Requisites: THEATRE 150 and 250
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: None
Requisites: Consent of instructor
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 2020
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. Enroll Info: None Requisites: Consent of instructor Course Designation: Workplace - Workplace Experience Course Repeatable for Credit: Yes, for 5 number of completions Last Taught: Fall 2020

## THEATRE 361 - BACKSTAGE LABORATORY II

1-2 credits.
Emphasis on student's involvement with a specific responsibility within theatrical production. Enroll Info: None
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: No
Last Taught: Spring 2020
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. Enroll Info: None
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 2020

## THEATRE 363 - PRINCIPLES AND PRACTICE OF STAGE COSTUME DESIGN <br> 3-4 credits.

A survey of stage costume. Fundamentals inherent in costume design process; introduction to procedures and skills needed for executing costumes. Enroll Info: When taken for 4 credits, a lab component required.
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 2020

## 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. Enroll Info:

## None

Requisites: Sophomore standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2019
THEATRE 365 - SEWING FOR THE THEATRE
3 credits.
Intermediate sewing techniques used to create theatrical garments.
Enroll Info: None
Requisites: THEATRE 263
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
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. Enroll Info: None
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 2020

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. Enroll Info: None
Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
Requisites: THEATRE 367
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 370 - DRAFTING FOR THE THEATRE
3-4 credits.
Methods and development of techniques used in theatrical drafting.
Enroll Info: None
Requisites: THEATRE 160 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
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. Enroll Info: None 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 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.
Enroll Info: None
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 2020

THEATRE 379 - INTRODUCTION TO STAGE MANAGEMENT 3 credits.

Principles of stage management from auditions through closing night.
Class work and supplementary production experience. Enroll Info: None
Requisites: THEATRE 160 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 2020
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. Enroll Info: None
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
THEATRE 420 - THEATRE AND SOCIETY
3 credits.
Analysis of the ideological and cultural meanings in Western theatre from the perspectives of gender, race, ethnicity, and sexual identity. Enroll Info:

## None

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 2012

## 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. Enroll Info: None
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

THEATRE/LITTRANS 423 - IN TRANSLATION: SLAVIC DRAMA IN CONTEXT
3 credits.
Slavic playwrights and the European tradition of theatre and drama. Enroll Info: None
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: 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. Enroll Info: None
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 2015

## THEATRE/CURRIC 426 - HISTORY, THEORY, AND DRAMATIC CRITICISM IN THEATRE FOR YOUNG AUDIENCES <br> 3-4 credits.

Historiographical perspectives in theatre for young audiences; analysis of plays for young people, theoretical implications, assumptions, current developments. Enroll Info: None
Requisites: THEATRE 160, 200, THEATRE/CURRIC/SLAVIC 362, 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
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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
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 2020
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. Enroll Info: None
Requisites: THEATRE 250
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No

## THEATRE/CURRIC 462 - THEATRE FOR YOUNG AUDIENCES: <br> PRODUCTION <br> 3-6 credits.

A practical class: preparation and performance of a production for young audiences, with development and implementation of accompanying educational material. Enroll Info: None
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. Enroll Info: 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 2020
THEATRE 466 - STAGE LIGHTING DESIGN II
3-4 credits.
Detailed study of lighting design techniques and professional practices for commercial and resident theatres. Enroll Info: None
Requisites: 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 2017
THEATRE 469 - INTERDISCIPLINARY STUDIES IN THE ARTS 1-4 credits.

Guest artists offer interdisciplinary courses on topics appropriate to their specializations. Enroll Info: None

## 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 2017
THEATRE 472 - SCENIC PAINTING
3 credits.
Painting scenery for the stage. Techniques for painting drops, flats, and props in a range of illusion effects. Enroll Info: None
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 2020

## 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. Enroll Info: None
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: 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.

## Enroll Info: None

Requisites: None
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## 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. Enroll Info: None
Requisites: Junior standing
Repeatable for Credit: No
Last Taught: Summer 2020

## THEATRE 522 - EXPERIMENTAL DRAMA: THE THEATRE OF EUROPE

 1850-THE PRESENT3 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. Enroll Info: None
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

## 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. Enroll Info: None
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 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. Enroll Info: None
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 2020
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. Enroll Info: None 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

## THEATRE/ANTHRO/FOLKLORE/MUSIC 539 - THE FOLKLORE OF FESTIVALS AND CELEBRATIONS <br> 3 credits.

Survey of interdisciplinary literature on social/performative folklore aesthetics and environments by in-depth study of three festivals and ceremonies. Required field trips. Enroll Info: None
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 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. Enroll Info: None
Requisites: THEATRE 240 and 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: Yes, unlimited number of completions
Last Taught: Fall 2020
THEATRE 550 - ADVANCED SCENE STUDY
1-3 credits.
Intensive scene study from the major works of selected modern playwrights. Enroll Info: None
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 2014
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. Enroll Info: None
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 2020
THEATRE/CURRIC 562 - DRAMA IN EDUCATION: ADVANCED STUDIES 3-4 credits.

Advanced studies in theories and practices of drama in education. Enroll Info: None
Requisites: 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. Enroll Info: None
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 2017
THEATRE 568 - DIRECTING LAB
3 credits.
Analysis, conceptualization and rehearsal of a play culminating in a performance presented for an audience. Enroll Info: None
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 2013
THEATRE 570 - ADVANCED STAGECRAFT
3 credits.
An intensive study of stage rigging, scenic locomotion, set construction and structural analysis techniques. Enroll Info: None
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. Enroll Info: None
Requisites: 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. Enroll Info: None
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
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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 2020
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. Enroll Info: None

## 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. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
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. Enroll Info: None
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 2019
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. Enroll Info: None
Requisites: 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: Fall 2020

## 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. Enroll Info: None
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 2020

## THEATRE 681 - SENIOR HONORS THESIS

3 credits.
Mentored individual study for students completing honor theses. For further information, consult the department's Undergraduate Advisor. Enroll Info: None
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. Enroll Info: None
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. Enroll Info:

## None

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
THEATRE 692 - SENIOR THESIS
2-3 credits.
Mentored individual study for students completing theses. Enroll Info:

## None

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

THEATRE 698 - DIRECTED STUDY
1-6 credits
Collaborate with instructor for personalized curriculum. Enroll Info: None
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. Enroll Info: None
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 2020

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. Enroll Info: None
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. Enroll Info: None
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 <br> 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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

THEATRE 768 - ADVANCED PROBLEMS IN DIRECTING 3 credits

Special directing challenges, e.g., musical theatre, new work and adaptation development, performance styles, multimedia challenges. Enroll Info: None

Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

THEATRE 770 - ADVANCED THEATRE TECHNOLOGY
3 credits.

Detailed study of research and practice in the physical theatre and its scenic devices. Enroll Info: None
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. Enroll Info: None 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

THEATRE 911 - SEMINAR-PROBLEMS IN THEATRE AND DRAMA 2-3 credits

Topics variable. Enroll Info: None
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. Enroll Info: None

Requisites: 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 972 - SEMINAR-ADVANCED PROBLEMS IN STAGE DESIGN 3 credits.

Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Fall 2011

## THEATRE 990 - RESEARCH AND THESIS

1-9 credits
Independent research and writing under the supervision of a staff member. Enroll Info: None
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

## THEATRE 999 - INDEPENDENT STUDY

1-3 credits.

Independent pursuit of a creative project designed by the student and supervised by a staff member. Enroll Info: None
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/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. As an ethnic studies class, 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. Enroll Info: None
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 2020
URB R PL/A A E/ECON/REAL EST 306 - THE REAL ESTATE PROCESS 3 credits.

Introductory survey course. Decision-making processes for the manufacture, marketing, management and financing of real estate space. Survey of institutional context, economics of urbanization, historical pattern and structure of city growth, and public policy issues regarding urban environment and business management. Enroll Info: None
Requisites: Sophomore standing and (ECON 101 or 111) or member of 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: Fall 2020

## URB R PL/JOURN/POLI SCI 373 - INTRODUCTION TO SURVEY RESEARCH <br> 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. Enroll Info: 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 2020
URB R PL/ECON/REAL EST 420 - URBAN AND REGIONAL ECONOMICS 3 credits.

Nature and structure of urban economies; location of economic activity; economic analysis in an urban framework; principles of urban economic development, housing, transportation, poverty and unemployment and municipal finance. Forecasting of economic activity using census and socioeconomic data. Enroll Info: None
Requisites: (ECON 101 or 111) or member of Business Exchange program
Course Designation: Breadth - Social Science
Level - Advanced
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## URB R PL/ECON/ENVIR ST/POLI SCI 449 - GOVERNMENT AND NATURAL RESOURCES <br> 3-4 credits.

Problems of public policy and administration for development and use of natural resources. Enroll Info: None
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
Sustain - Sustainability
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. Enroll Info: None
Requisites: Junior standing
Course Designation: Breadth - Social Science
Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## URB R PL/GEOG 503 - RESEARCHING THE CITY: QUALITATIVE STRATEGIES <br> 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. Enroll Info: Jr st
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 2020
URB R PL/GEOG 505 - URBAN SPATIAL PATTERNS AND THEORIES
3 credits.
Various urban empirical regularities and theories which explain them.
Enroll Info: GEOG/URB R PL 305 or consent of instructor
Requisites: None
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 2019
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-Word War II era, with emphasis on changes in built environment, public space and infrastructure, land use, and urban systems. Enroll Info: Jr st
Requisites: None
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. Enroll Info: None
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

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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
URB R PL/ENVIR ST/GEOG/LAND ARC 532 - APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING
3 credits.
Explores planning-related GIS data, applications, analytical tools, and implementation issues. Enroll Info: None
Requisites: GEOG/CIV ENGR/ENVIR ST 377
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
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. Enroll Info: None
Requisites: Senior 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

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. Enroll Info: None
Requisites: A A E 215, ECON 101, or 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
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. Enroll Info: Open to Srs and Grads. Cons inst
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 2020
URB R PL 597 - UNIVERCITY YEAR GUIDED EXPERIENCE
1 credit.
Helps orient students to the UniverCity Year program and provide students with underlying theory and applied knowledge around community engagement, the function of local governments, and working with local officials and professional staff. Students gain core competencies for applied, community-based learning projects and the importance of place-based learning. The course exposes students to multidisciplinary approaches to problem-solving, access and use information resources, reflect upon or address ethical and professional issues, consider the social and systemic roots of issues faced by local municipalities, and prepare written reports. Enroll Info: None
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: 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. Intended for students without design backgrounds. Enroll Info: Sr st cons inst or Grad st
Requisites: None
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
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) this course 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. Enroll Info: None
Requisites: Senior or graduate standing only
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 Sustain - Sustainability
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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 2020

## 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. Enroll Info: None
Requisites: 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 <br> 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. Enroll Info: None
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. Enroll Info: None
Requisites: Completion of introductory Sociology course (SOC/
C\&E SOC 140, SOC 181, SOC/C\&E SOC 210, or SOC/C\&E SOC 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: Fall 2017

## 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. Enroll Info: Jr st or cons inst
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
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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
URB R PL 699 - DIRECTED STUDY
1-6 credits
Enroll Info: Jr or Sr st written cons inst
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
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

## URB R PL/CIV ENGR/ENVIR ST 717 - WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR I <br> 1 credit.

This is the first of two seminars used for planning the activities of the Summer Session Water Resources Management Practicum (ENVIR ST/ CIV ENGR/URB R PL 719). Enroll Info: None
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/CIV ENGR/ENVIR ST 718 - WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR II
2 credits.
This seminar is used for planning the field work, analysis and reporting of the Summer Session Water Resources Management Practicum (ENVIR ST/CIV ENGR/URB R PL 719). Enroll Info: Adv Grad standing or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Envir St/Civ Engr/URB R PL/ CIV ENGR/ENVIR ST 718 or consent of instructor
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Summer 2020

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. Enroll Info: None
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 2020

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. Enroll Info: None
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 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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: Grad st. Stdts in Urb R PI only Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## JRB 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. Enroll Info: None
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 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 decisionmakers, and major programmatic responses to these issues; the role of planning in response to these trends and issues. Enroll Info: None
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. The case studies are prefaced by sessions which places them in the broader framework of planning history, decision making process models and planner role models. A second section deals with subnational planning and regional development issues in developing countries. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No

## URB R PL/ENVIR ST/PUB AFFR 809 - INTRODUCTION TO ENERGY ANALYSIS AND POLICY <br> 3 credits.

Interdisciplinary seminar for the Energy Analysis and Policy Curriculum. Strategy and policy problems in energy policy, both national and international. Enroll Info: Grad st admission to Energy Anal and Policy curric or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020
URB R PL/ENVIR ST/PUB AFFR 810 - ENERGY ANALYSIS SEMINAR 1-3 credits.

Interdisciplinary seminar for the Energy Analysis and Policy Curriculum. Quantitative energy content and energy flows as an aid to problem analysis and policy formulation. Enroll Info: Grad st admission to Energy Anal and Policy Curric or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2020

URB R PL 812 - STRATEGIES FOR PLANNING EFFECTIVENESS 3 credits.

Methods by which planning effectiveness can be increased, and constraints imposed on planning effectiveness can be overcome. Theoretical models for greater planning effectiveness, strategies for increasing the influence of planning agencies, implications of effective planning for education, values, ethics, and techniques. Experienced planners discuss effectiveness techniques. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

## URB R PL 814 - ENVIRONMENTAL AND ALTERNATIVE DISPUTE RESOLUTION IN PLANNING <br> 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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
URB R PL 833 - PLANNING AND THE LEGAL SYSTEM
3 credits.
An examination for students of planning 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
URB R PL/CIV ENGR 839 - LAND USE AND COMMUNICATION SYSTEMS PLANNING
3 credits.
Application of systems analysis to the planning of land use and transportation systems; system modeling; environmental impacts; value measurement; decision-making strategies. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2013

## 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. Enroll Info: URB R PL 741912 or cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Summer 2020

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
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 <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
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. Enroll Info: None
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/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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## URB R PL/POLI SCI/PUB AFFR 890 - FEDERAL BUDGET AND TAX POLICY AND ADMINISTRATION <br> 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. Enroll Info: None
Requisites: 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. Enroll Info: None
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/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. Enroll Info: None

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/LAND ARC 920 - REGIONAL DESIGN WORKSHOP 2-3 credits.

Development and application of a systematic approach to analysis and design at macro- and micro-scales within a regional context. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2012
URB R PL/ENVIR ST 923 - SEMINAR-LAND PROBLEMS:
INSTITUTIONAL DEVELOPMENT
2-3 credits

Land tenure and utilization research and policy problems. Enroll Info: None
Requisites: 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
Enroll Info: None
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

## 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. Enroll Info: None

Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2014

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. Enroll Info: URB R PL 844 or cons inst
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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018

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. Enroll Info: None
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. Enroll Info: None

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.

Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement

Repeatable for Credit: No
Last Taught: Fall 2020
URB R PL 999 - INDEPENDENT WORK
1-3 credits
Enroll Info: None
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

## 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. Enroll Info: Not recommended for students with credit already in Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151 or 152
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 2020

## ZOOLOGY/BIOLOGY 102 - ANIMAL BIOLOGY LABORATORY

2 credits
General concepts of animal biology at an introductory level. The general body plans and strategies used to accomplish the basic tasks of staying alive of 9 major animal groups are studied using preserved and live animals. The diversity within each group of animals is studied by integrating the body plans with the lifestyle and ecology of the animals. The evolutionary relationships between the animals is a major part of the course. Dissections of earthworm, freshwater mussel,squid, sea star, and rat also aid the study of these general principles. Enroll Info: Not recommended for students with credit already in Zoology/Biology/ BOTANY/BIOLOGY/ZOOLOGY 151/152
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 2020

## ZOOLOGY/BIOLOGY/BOTANY 151 - INTRODUCTORY BIOLOGY

 5 creditsFirst semester of a two semester course designed for majors in biological sciences. 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. HS chem or concurrent registration in college chemistry strongly advised. Enroll Info: Not recommended for students with credit already in Zoo/Bio 101, 102 or Botany/Bio 130
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 2020

## ZOOLOGY/BIOLOGY/BOTANY 152 - INTRODUCTORY BIOLOGY

5 credits.
Second semester of a two semester course designed for majors in biological sciences. Continuation of 151. 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. Enroll Info: Biology/Botany/ZOOLOGY/BIOLOGY/
BOTANY 151. Not recommended for students with credit already in Zoology/BIOLOGY/ZOOLOGY 101,102 or Botany/BIOLOGY/BOTANY 130
Requisites: 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: Fall 2020

## ZOOLOGY 153 - INTRODUCTORY BIOLOGY

3 credits.
One-semester course designed for engineering majors including chemical and biological engineering. 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. Enroll Info: Meets with Zoology/Biology/BOTANY/ BIOLOGY/ZOOLOGY 151. Engineering students who need a biology course with a lab component should enroll in Zoology/biology/BOTANY/ BIOLOGY/ZOOLOGY 151. Concurrent registration in college chemistry strongly advised. Not recommended for students with credit already in Zoo/Bio 101, 102 or Botany/Bio 130
Requisites: Declared in an Engineering program
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 2020
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 "studentsourcing antibiotic discovery." Enroll Info: 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: Fall 2020

## ZOOLOGY 199 - DIRECTED STUDY

1-3 credits.
Recommended for Fr and So. Enroll Info: None
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 2020

ZOOLOGY/BOTANY/ENVIR ST 260 - INTRODUCTORY ECOLOGY 3 credits.

For nonbiology students: the relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs. Enroll Info: Open to Freshmen. Does not count toward Botany or Zoology major
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ZOOLOGY 299 - DIRECTED STUDIES IN ZOOLOGY

## 1-3 credits.

Intermediate level directed study/independent research. The purpose of this course to introduce undergraduate students to research questions and, facilitate their learning in the field of biology by providing them with guidance and mentorship in a research environment. Enroll Info: None
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: Fall 2020

## ZOOLOGY 300 - INVERTEBRATE BIOLOGY AND EVOLUTION

3 credits.
Provides an 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. The aim of this course is to understand animal diversity from a phylogenetic and developmental perspective. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102; or ZOOLOGY151 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 2019

## ZOOLOGY 301 - INVERTEBRATE BIOLOGY AND EVOLUTION LAB

 2 credits.Provides an introduction to invertebrate diversity and biology, with emphasis on anatomy, development, and systematic relationships of the main animal phyla, in parallel with the Invertebrate Biology and Evolution lecture course. 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. The aim of this course is to understand animal diversity from a phylogenetic and developmental perspective. Enroll Info: None
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 2019

## ZOOLOGY/ENTOM 302 - INTRODUCTION TO ENTOMOLOGY

4 credits.
Principles including morphology and classification; a general collection of insects required of each student. Enroll Info: An elem course in zoology
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020
ZOOLOGY 303 - AQUATIC INVERTEBRATE BIOLOGY
3 credits.
This course focuses on the form, function, development, basic physiology and ecology of the freshwater and marine invertebrates in the context of their environment. As a lecture and lab combination students will get a chance to study live invertebrate specimens, their habitat selection, adaptation and diversity. Enroll Info: ZOOLOGY/BIOLOGY 101 and ZOOLOGY/BIOLOGY 102 OR BIOLOGY/BOTANY/ZOOLOGY 151 and/or BIoLogy/Botany/Zoology 152
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: 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101 and 102) or 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 2020

## ZOOLOGY/ENVIR ST 315 - LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES <br> 2 credits.

General limnology. Physical, chemical and biological characteristics and processes of lakes. Environmental problems and rehabilitation of lakes. Enroll Info: Intro course in biol; intro course in chem recommended
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 2020

## ZOOLOGY 316 - LABORATORY FOR LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES <br> 2-3 credits.

Biological, physical, and chemical characteristics and their interrelationships in Wisconsin lakes and streams. Enroll Info: None
Requisites: 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 2020
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. Enroll Info: None
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 2015

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, or 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 2020

## 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. Enroll Info: So st. An intro biology course strongly recommended
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
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ZOOLOGY/ENTOM 371 - MEDICAL ENTOMOLOGY

3 credits.
Arthropods of medical and veterinary importance, how they affect their hosts and transmit diseases. Enroll Info: Intro course in zool or vet sci 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
Grad 50\% - Counts toward 50\% graduate coursework requirement Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
ZOOLOGY 400 - TOPICS IN BIOLOGY
1-3 credits

Subject matter, credits and prerequisites vary. Enroll Info: Varies
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: Yes, unlimited number of completions
Last Taught: Fall 2020

## 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. At the same time, it introduces students to the natural science museums and library collections located on the UW campus. Enroll Info: Open to Jr, Sr, Grads, Adv special stdts
Requisites: Junior, senior, or graduate standing only
Course Designation: Level - Intermediate
L\&S Credit - Counts as Liberal Arts and Science credit in L\&S
Repeatable for Credit: No
Last Taught: Fall 2020

## 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. Enroll Info: An elem course in zool or botany
So st; Genetics/Botany/Zool 160 or 466 recommended
Requisites: Sophomore standing and ZOOLOGY/BIOLOGY/BOTANY 151, BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY 101, BIOCORE 301, 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ZOOLOGY 425 - BEHAVIORAL ECOLOGY

3 credits.

Designed to 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. The course approaches these questions with the perspective that understanding the proximal and ultimate basis of behavior requires understanding the ecological and evolutionary context of behavior. Enroll Info: None
Requisites: Enrollment limited to students that have taken one of the following courses: ZOOLOGY/BIOLOGY/BOTANY 151 AND 152; or ZOOLOGY/BIOLOGY 101 AND BOTANY/BIOLOGY 130; or Biocore 301 AND 302.
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 2020

## 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. Two evening practical exams. Enroll Info: Intro crse in zool So st
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 2020

## ZOOLOGY/BOTANY 450 - MIDWESTERN ECOLOGICAL ISSUES: A CASE STUDY APPROACH <br> 2 credits.

This web course explores 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. Enroll Info: Intro biology crse, interest in solving problems
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: Summer 2020
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; lecture and lab. Enroll Info: Intro course in botany zoology, or Bot/Zoo 151-152, or Biocore 301 or 333 ; for biol sci majors only
Requisites: None
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: Fall 2020

## ZOOLOGY 470 - INTRODUCTION TO ANIMAL DEVELOPMENT

 3 credits.This course introduces students 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. Enroll Info: Zool 101 or Zool 151/152
Requisites: Enrollment limited to students that have taken one of the following courses: ZOOLOGY/BIOLOGY/BOTANY 151; or BOTANY/ BIOLOGY 130; or 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: One of the following: Bot/For/ Zoo 460, Ent/PI Path/For 500, PI Path/Bot 505, Forestry 550, or Entom 342
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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2020
ZOOLOGY 500 - UNDERGRADUATE NEUROBIOLOGY SEMINAR
1 credit.

Neurobiology seminar for undergraduates. A faculty lead lecture/ discussion about a wide range of topics in neurobiology research from molecular neurobiology to integrative systems. Topics discussed by invited UW-Madison faculty researchers in any given semester can include: ion channels and synaptic plasticity, neural development, sensory and cognitive physiology, biological basis of behavioral disorders and cognitive decline. Enroll Info: None
Requisites: Declared in Neurobiology or Biology with the neurobiology option and ZOOLOGY/PSYCH 523 or concurrent enrollment (or NTP 523 prior to Fall 2017)
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 2020

## ZOOLOGY 504 - MODELING ANIMAL LANDSCAPES

3-5 credits.
This course uses computer and GIS-based modeling to explore how climate, topography, vegetation type, and key animal properties all interact to specify from first principles the energetgics and activity constraints of animals on any landscape. It links individual, population and community variables at landscape scales. Enroll Info: Jr st 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 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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY 101 and 102) or 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 2020

## ZOOLOGY/ENVIR ST 511 - ECOLOGY OF FISHES LAB

2 credits.
Anatomy and taxonomy of Wisconsin fishes and projects in fish ecology. Enroll Info: None
Requisites: Zoo 511 - needs Zoo 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 2020

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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/
BOTANY 151 and 152 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020

## 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/
BOTANY 151 and 152 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
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. Enroll Info: None
Requisites: (ZOOLOGY/BIOLOGY/BOTANY 151,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 2020

## ZOOLOGY 525 - TROPICAL HERPETOLOGY

1 credit.
This course introduces students to perhaps the least known but most threatened groups of tropical vertebrates, the amphibians and reptiles ("herps"). The course consists of a series of eight two hours lectures that introduce students to 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. Enroll Info: ZOOLOGY/ BIOLOGY 101 and ZOOLOGY/BIOLOGY 102 or BIOLOGY/BOTANY/ ZOOLOGY 152 or equivalent
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 2016
ZOOLOGY/ENTOM 540 - THEORETICAL ECOLOGY
3 credits.
Introduction to theoretical ecology, including hands-on experience in computer modeling. For students with ecology background; does not require a strong math background. 3-credit option requires project and consent of instructor. Enroll Info: 1 year calculus, Zoo/Bot 260, Zoo/Bot/ For 460 or equiv, Jr st
Requisites: Junior standing; not open to special students
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2019

## 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. Enroll Info: GEOSCI 304 or 540 or course in introductory biology
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: 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. Enroll Info: GEOSCI 107, 110, 204, or a course in introductory biology
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
Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2014

## ZOOLOGY/PSYCH 550 - ANIMAL COMMUNICATION AND THE ORIGINS OF LANGUAGE <br> 3 credits.

Signals, contexts, and mechanism of social communication in animals. Speech and non-verbal communication in human beings and possible arguments for the evolution of speech and language. Enroll Info:
PSYCH 449 or 450 or Zoology 531 or 532
Requisites: PSYCH 225 or PSYCH 285
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 2012
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). Enroll Info: None
Requisites: ZOOLOGY 470 or ZOOLOGY/PSYCH 523 or ZOOLOGY 625 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 2020

## ZOOLOGY/GENETICS/MD GENET 562 - HUMAN CYTOGENETICS

2 credits.
Fundamental principles of cytogenetics and special problems of human cytogenetics. Enroll Info: None
Requisites: GENETICS 466, 468, BIOCORE 587, or declared in Master of Genetic Counselor Studies 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
Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2019

## ZOOLOGY/F\&W ECOL/LAND ARC 565 - PRINCIPLES OF LANDSCAPE ECOLOGY <br> 2 credits.

Landscape ecology emphasizes the importance of spatial patterns at broad scales. Concepts and applications are emphasized, especially for seniors and graduate students in applied natural resource fields. The course is also a prerequisite for Zoology/Forest Ecology 665, Advanced Landscape Ecology. Lecture format with discussion. Enroll Info: Botany/ Zoology/Forest 460, or Forest 550, a crse in stats, cons inst
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
ZOOLOGY 570 - CELL BIOLOGY
3 credits.
Comprehensive course on modern aspects of cell biology. Enroll Info: One yr college biol, one yr chem
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 2020
ZOOLOGY 603 - ENDOCRINOLOGY
3-4 credits
An introduction to the role that hormones play in a variety of physiological pocesses 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. Enroll Info: Background in biochem cell-molecular biol recommended, but not required
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: No
Last Taught: Fall 2020

## ZOOLOGY 604 - COMPUTER-BASED GENE AND DISEASE/DISORDER RESEARCH LAB

2 credits.
In recent years, a large number of open access biological and biomedical databases have become available for on-line, computer based research. Among these databases are the National Center for Biotechnology Information, Allen Brain Atlas, NIH DAVID, Genemania, ToppClusterPhenopedia, GeneNetwork, GWAS Central, and Broad Institute's MSIgDB. Within these and other sites is a wealth of information regarding genes, gene expression, gene pathways, behavioral characteristics, and disorders or diseases, such as autism, arthritis, bipolar disorder, and schizophrenia. Learning to navigate the various sites to take advantage of the information and push scientific discovery forward is a valuable skill to develop for any student interested in a career in science or medicine. In the early part of this laboratory course, students will be guided through a range of databases and shown how to extract information to develop new ideas. A key part of the course is that each student will pick a disease or disorder of interest (e.g., autism, arthritis, epilepsy, schizophrenia) and use multiple databases to develop new ideas on which genes may be playing important, but previously underappreciated or unknown roles. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101 OR ZOOLOGY/BIOLOGY/ BOTANY 151 OR BIOCORE 381
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

## ZOOLOGY 611 - COMPARATIVE AND EVOLUTIONARY PHYSIOLOGY

 3 credits.Course examines general physiological principles by comparing taxa from diverse evolutionary histories and ecological adaptations. Examples include adaptation to environments differing in salinity, temperatue, altitude, pressure, or pollution, and examines how nervous and endocrine systems evolved to support the adaptations. Enroll Info: Elem crse in Botany or Zoology
Requisites: In order to enroll, student must have taken one of the
following: ZOOLOGY/BIOLOGY 101; or BOTANY/BIOLOGY 130; or ZOOLOGY/BIOLOGY/BOTANY 151; or ZOOLOGY/BIOLOGY/BOTANY 152; or Biocore 301
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 2020
ZOOLOGY 612 - COMPARATIVE PHYSIOLOGY LABORATORY
2 credits.
Recommended for majors. Enroll Info: None
Requisites: Zoo 612 -needs Zoo 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 2020

## ZOOLOGY/NEURODPT/NTP 616 - LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR <br> 4 credits.

Students will do three independent experimental modules exploring neurophysiology and behavior, each taking 4-5 weeks. Students will work in groups of 2 or 3 and will learn techniques and then develop their own short investigations into each of three separate areas of neurobiology. There will be continual interaction between students and faculty. Enroll Info: PSYCH/ZOOLOGY 523 and PHYSIO /ZOOLOGY 524 or PHMCOL-M/ PHYSIOL 610 and PHMCOL-M/PSYCH/NEURODPT/NTP 611
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: 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. Enroll Info: Jr st; college level elem crse in biology or psych
Requisites: Junior standing; not open to special students
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. Enroll Info: Introductory biology. Background in neuroscience strongly recommended
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: Spring 2020

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. Enroll Info: None
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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Spring 2019
ZOOLOGY 625 - DEVELOPMENT OF THE NERVOUS SYSTEM 2 credits.

Survey of the principles guiding neuronal development. Course will cover descriptive and experimental analyses of developmental mechanisms underlying the formation of both vertebrate and invertebrate nervous systems. Enroll Info: One intermed level crse in biol; background in development neurobiol recommended
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
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. Enroll Info: None
Requisites: (BIOCHEM 501 or 507) and (BIOCORE 383, 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 2020

## ZOOLOGY/BOTANY/ENVIR ST/F\&W ECOL 651 - CONSERVATION BIOLOGY <br> 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. Enroll Info: An ecology crse (eg, Botany/ZOOLOGY/BOTANY/F\&W ECOL 460)
Requisites: None
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 2020

## 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. Enroll Info: None
Requisites: GENETICS 466, ZOOLOGY 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 2020
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. In this class, students will be introduced to climate change and its ecological impacts through engaging class discussions, online climate exercises, and group projects aimed at developing climate change adaptation plans. Enroll Info: Junior or Senior standing as a Forest Science or Wildlife Ecology major; graduate student standing; FW Ecol/Zoology/BOTANY/F\&W ECOL/ZOOLOGY 460; or consent of instructor
Requisites: Declared in Forest Science or Wildlife Ecology major with junior standing, or ZOOLOGY/BOTANY/F\&W ECOL 460, or graduate 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 Sustain - Sustainability
Repeatable for Credit: No
Last Taught: Fall 2020

## ZOOLOGY/BOTANY/F\&W ECOL 672 - HISTORICAL ECOLOGY

 2 creditsHistorical Ecology is an area of ecology that considers the importance of past events for current ecosystems. Concepts and applications are emphasized. Multidisciplinary emphasis, for seniors and graduate students in biological sciences, social studies, and humanities. Discussion format. Enroll Info: Graduate or senior standing and consent of instructor
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: No
Last Taught: Spring 2018

## ZOOLOGY/NEURODPT/PSYCH 674 - BEHAVIORAL NEUROENDOCRINOLOGY SEMINAR <br> 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. Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101, 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 2019

## ZOOLOGY 677 - INTERNSHIP IN ECOLOGY

2 credits.
A seminar course to provide support and structure for undergraduates interested in gaining hands-on experience working as a volunteer with local environmental, ecological or conservation groups. Enroll Info: Recommended for Jr Sr ; graded on a letter basis
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: Spring 2020

## ZOOLOGY 681 - SENIOR HONORS THESIS

1-6 credits.
Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: Senior standing
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 2020

## ZOOLOGY 682 - SENIOR HONORS THESIS

1-4 credits
Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: Senior standing
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
ZOOLOGY 691 - SENIOR THESIS
1-6 credits.
Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: 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: Yes, unlimited number of completions
Last Taught: Fall 2020
ZOOLOGY 692 - SENIOR THESIS
1-4 credits.
Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: 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 2020
ZOOLOGY 698 - DIRECTED STUDY
1-6 credits.
Selected research projects. Recommended for Jr and Sr. Enroll Info: None
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 2020
ZOOLOGY 699 - DIRECTED STUDIES IN ZOOLOGY
1-6 credits.
Selected research projects. Recommended for Jr and Sr. Enroll Info:
Recommended for Jr Sr; graded on a lettered basis; requires written cons inst
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 2020

## 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. Enroll Info: Grad st. Experience in modeling, programming, or stats
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

## ZOOLOGY/ATM OCN/ENVIR ST/GEOSCI 750 - PROBLEMS IN OCEANOGRAPHY <br> 3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2018
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. Enroll Info: None Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ZOOLOGY 799 - INDEPENDENT STUDY
1-6 credits.
Advanced zoology, project related; not covered in regular courses. Enroll Info: None
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

## ZOOLOGY/BOTANY/ENTOM/GENETICS 820 - FOUNDATIONS OF EVOLUTION <br> 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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020
ZOOLOGY/BOTANY/F\&W ECOL 879 - ADVANCED LANDSCAPE ECOLOGY 3 credits.

Landscape ecology emphasizes spatial patterning-its development and importance for ecological processes--and often focuses on large regions. Concepts, methods, and applications of landscape ecology will be learned through lectures, readings, exercises in quantitative approaches, and an independent project. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad $50 \%$ - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2020
ZOOLOGY/ATM OCN/BOTANY/CIV ENGR/ENVIR ST/GEOSCI 911 LIMNOLOGY AND MARINE SCIENCE SEMINAR
1 credit.
Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst
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

## ZOOLOGY/ENTOM/PSYCH 950 - INTERDISCIPLINARY SEMINAR IN ANIMAL BEHAVIOR <br> 1 credit.

Research methods in animal behavior studies in many disciplines. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward $50 \%$ graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2013

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. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50\% - Counts toward 50\% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2020

## ZOOLOGY/AN SCI/OBS\&GYN 954 - SEMINAR IN ENDOCRINOLOGYREPRODUCTIVE PHYSIOLOGY <br> 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. Enroll Info: None 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

## ZOOLOGY 955 - SEMINAR-LIMNOLOGY

1 credit.
Sections in various fields of zoological research. Enroll Info: None 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

ZOOLOGY 956 - SEMINAR-ECOLOGY
1 credit.
Sections in various fields of zoological research. Enroll Info: None
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
ZOOLOGY 957 - SEMINAR-EVOLUTION
1 credit.
Sections in various fields of zoological research. Enroll Info: None
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

ZOOLOGY 958 - SEMINAR-BIOPHYSICAL AND PHYSIOLOGICAL
ECOLOGY
1 credit.
Sections in various fields of zoological research. Enroll Info: None
Requisites: 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. Enroll Info: None
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

ZOOLOGY 962 - SEMINAR-ETHOLOGY
1 credit.
Sections in various fields of zoological research. Enroll Info: Grad st written cons inst
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
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. Enroll Info: None
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.
Enroll Info: None
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
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