AHS 1101 Orientation to Health Careers
OPT No Aud, 1 credit(s); Credit will not be granted if credit has been received for: AHS 1102;
Instructor: Simpson, Scott W
Description: This one credit course is designed for students interested in exploring the many career paths available in health care. Students will have the opportunity to reflect on their own values, skills and interests. You will also hear first-hand from an extensive line-up of guest speakers and learn more about the academic and experiential requirements for health professional schools at the University. Activities will include interest inventories, discussion, journaling, developing an action plan, and other reflective assignments. This course will help you decide if a career in the health professions is a good fit for you.

AHS 1102 Orientation to Health Careers
OPT No Aud, 1 credit(s); Credit will not be granted if credit has been received for: AHS 1101;
Instructor: Kachgal, Mera M
Description: This Web-based, one credit course is for undergraduate students who are exploring health majors and professions. Students will have the opportunity to reflect on their own values, skills and interests. You will learn more about the academic and experiential requirements for health professional schools at the University. Activities will include interest inventories, discussion, journaling, developing an action plan, and other reflective assignments. This course will help you decide if a career in the health professions is a good fit for you.
Style: 100% Web Based.
Grading: 33% quizzes, 33% reflection paper, 33% other evaluation.
Exam Format: multiple choice, matching, true/false, and short answer

AHS 1600 The Future Physician I: Medicine in the 21st Century
A-F only, 1 credit(s);
Instructor: Todd, Tricia
Description: Learn about the multi-disciplinary field of medicine and the challenges shaping the work of health professionals in the healthcare field. Explore the history of medicine and health as well as grow in an understanding of global health issues and global healthcare systems. Explore the relationships and roles of physicians, their team members and the patient and learn about the commitment needed to become a physician. This course is taught collaboratively by Dr. Shailey Prasad, MD, MPH, Assistant Professor, University of Minnesota, Department of Family Medicine and Community Health; Investigator, Rural Health Research Center, University of Minnesota; Medical Director, Broadway Family Medicine, and Tricia Todd, MPH, Assistant Director of the Health Careers Center, University of Minnesota.

AHS 1602 The Future Physician III: Experiences in Health
2 credit(s);
Instructor: Todd, Tricia
Description: Registration for this course requires instructor approval and a permission number. Requests to Tricia Todd, MPH, course
instructor, at todd0002@umn.edu. An essential component of your application to medical school is experience in a health care setting. This course requires you to complete 35 hours of volunteer experience in a setting that employs physicians and serves patients. In addition, you will complete a medical school application plan and gain additional insight into your own fit with the field of medicine. Offered: Fall, spring, summer semesters; Offered online Prerequisites: AHS 1601 and instructor approval To Register/Permission Numbers:

AHS 2300 Orientation to Clinical Research
A-F only, 1 credit(s);
Instructor: Kachgal,Mera M
Description: AHS 2300: Orientation to Clinical Research is a unique, small seminar course that gives students an exposure to the world of clinical research at the University of Minnesota and beyond. Course topics include ethics for researchers, professionalism, and research methods. The class meets eight times during the semester. Students also complete a 12-hour supervised field placement at a clinical research center and develop a University Research Opportunities Program (UROP) proposal in consultation with a faculty mentor. Prerequisite requirements include: -Instructor Permission -Status as a sophomore or second year student during the fall in which the course is offered (students with extra credits due to PSEO or AP are eligible) -Health-related experience through volunteering, shadowing, interning, or working -Interest in research - Cumulative undergraduate GPA of 3.5 or higher Note: This course is offered only in the fall. Style: 90% Lecture, 10% Student Presentation. 12-hour field placement outside of class meetings

AHS 2707H Global Health Challenges for Future Health Professionals
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Todd,Tricia
Description: This is a two-credit course designed for freshman and sophomore students in the University Honors Program who have an interest in learning more about emerging health issues and the challenges and opportunities health professionals have as they work to address those health issues. You will hear from researchers, faculty, and practicing health professionals who are wrestling with the challenges to human and animal health and how those challenges are tied to the changing expectations and responsibilities of health professionals. The increasing, changing and expanding challenges to human health will require more broadly and highly trained health professionals in the future. This course will help you understand what you need to prepare for, and how to begin that preparation. This course is intended for freshman/sophomore students. Questions, contact the University Honors Program.

AHS 4300 Directed Study
1-3 credit(s), max credits 6;
Instructor: Todd,Tricia
Description: Student may contact the instructor or department for information.

Accounting 3-122 Carlson School of Management

Acct 2050 Introduction to Financial Reporting
A-F only, 4 credit(s);SophCredit will not be granted if credit has been received for: APEC 1251;
Instructor: Biondich,Nick E
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course, you will learn: --the nature of financial transactions; --the Generally Accepted Accounting Principles (GAAP) that businesses and nonprofit organizations in the U.S. must follow in reporting these transactions; --the vocabulary of financial accounting, sometimes described as the language of business; and --the representations made by financial statements. As you learn the fundamentals of accounting, you will gradually discern many areas that will affect you throughout your life. Whenever your corporate employer describes its financial goals, whenever you observe the stock market reacting to a corporation's earnings, whenever you learn about how a financially troubled company is taking steps to increase its profitability, accounting information is involved. This course will help you increase your understanding of events that take place daily in the financial community. Style: Online with handwritten exams Grading: 30% mid exam, 35% final exam, 35% written homework. Exam Format: Supervised, in-person (not online) exams

Acct 2050 Introduction to Financial Reporting
A-F only, 4 credit(s);SophCredit will not be granted if credit has been received for: APEC 1251;
Instructor: Caliendo,Charles Michael
Description: Student may contact the instructor or department for information.
Acct 2050 Introduction to Financial Reporting
A-F only, 4 credit(s); SophCredit will not be granted if credit has been received for: APEC 1251;
Instructor: Ma, Yuanyuan
Description: Student may contact the instructor or department for information.

Acct 2050 Introduction to Financial Reporting
A-F only, 4 credit(s); SophCredit will not be granted if credit has been received for: APEC 1251;
Instructor: Fang, Vivian W
Description: Student may contact the instructor or department for information.

Acct 2050 Introduction to Financial Reporting
A-F only, 4 credit(s); SophCredit will not be granted if credit has been received for: APEC 1251;
Instructor: Gu, Zhaoyang
Description: Student may contact the instructor or department for information.

Acct 2050 Introduction to Financial Reporting
A-F only, 4 credit(s); SophCredit will not be granted if credit has been received for: APEC 1251;
Instructor: Nam, Jonathan S
Description: Student may contact the instructor or department for information.

Acct 2050H Honors: Introduction to Financial Reporting
A-F only, 4 credit(s);
Instructor: White, Paul Andrew
Description: This course introduces the topic of financial accounting for U.S. organizations. The purpose of financial accounting is to provide information to owners of the firm and other interested parties to serve as the basis for making decisions about that firm. The student who successfully completes this class will be able to read and understand U.S. financial statements. This course is unusual in that it covers in one semester material that is more commonly covered in two semester courses or one and a half semester courses. The benefit to this is that the student can get a lot of education for the time and tuition dollar. Also, packing the introductory accounting into one semester frees up time and credit hours that can be used on elective courses. The cost to the student is obvious; this course moves quickly and you must be willing to put in extra time and effort in order to take advantage of this saving. The purpose of this class is to introduce accounting, which is both the language of business and its primary information system. The learning goal is that students be able to read and understand U.S. financial statements. By the end of the course, the student should be able to prepare basic financial statements including the cash flow statement and to read and interpret annual financial reports.
Style: 50% Lecture, 20% Discussion, 30% Small Group Activities.
Grading: 40% mid exam, 20% final exam, 8% special projects, 16% quizzes, 3% written homework, 13% class participation.

Acct 3001 Introduction to Management Accounting
A-F only, 3 credit(s);
Instructor: Caliendo, Charles Michael
Description: Student may contact the instructor or department for information.

Acct 3001 Introduction to Management Accounting
A-F only, 3 credit(s);
Instructor: Batina, Tom
Acct 3001 Introduction to Management Accounting  
A-F only, 3 credit(s);  
Instructor: Khan, Mozaffar  
Description: Student may contact the instructor or department for information.

Acct 3150 Role of the Accountant in Today's Finance Function  
S-N only, 1 credit(s);  
Instructor: Batina, Tom  
Description: Student may contact the instructor or department for information.

Acct 3199 Internship in Public Accounting  
S-N only, 2 credit(s);  
Instructor: Biondich, Nick E  
Description: Students interested in earning academic credit for work involving an accounting internship should contact Nick Biondich at 612-624-7055.

Acct 3201 Intermediate Management Accounting  
A-F only, 2 credit(s);  
Instructor: White, Paul Andrew  
Description: This course continues the topic of management accounting in greater depth. The purpose of management accounting is to provide information to management for costing products, as well as for planning, controlling, and evaluating business activities. The purpose of this class is to expand and build on the topics introduced in ACCT3001. The course will hone and refine the tools and techniques learned in introductory management accounting classes as well as improve your decision-making skills. We will also explore several topics not covered in the introductory class as well as consider how management accounting supports overall business strategy.  
Style: 10% Lecture, 45% Discussion, 45% Student Presentation.  
Grading: 33% final exam, 27% written homework, 20% in-class presentation, 20% class participation.

Acct 3299 Internship in Management Accounting  
S-N only, 2 credit(s);  
Instructor: Biondich, Nick E  
Description: Students interested in earning academic credit for work involving an accounting internship should contact Nick Biondich at 612-624-7055.

Acct 5101 Intermediate Accounting I  
A-F only, 4 credit(s);  
Instructor: Biondich, Nick E  
Description: Student may contact the instructor or department for information.

Acct 5101 Intermediate Accounting I  
A-F only, 4 credit(s);  
Instructor: Duke, Gordon Leon  
Description: Student may contact the instructor or department for information.

Acct 5101 Intermediate Accounting I  
A-F only, 4 credit(s);  
Instructor: Shroff, Pervin Keki  
Description: This course is designed for undergraduate students majoring in accounting and finance. The course begins with an overview of the historical, conceptual, and theoretical bases of financial accounting and a review of the principal financial statements. It provides an extensive examination of income measurement and accounting issues related to the assets of the firm. Students are expected to understand the theory that underlies the accounting issues covered and to become technically proficient in applying the accounting principles to the measurement and valuation of assets. In view of the harmonization of accounting world-wide, international financial reporting standards are discussed with the relevant topic when they differ from U.S. GAAP. The course emphasizes evaluation of financial statements and analysis of the impact of various accounting methods on the reported results of companies. Text: "Intermediate Accounting", 13th edition, Kieso, Weygandt and Warfield.  
Style: 70% Lecture, 30% Discussion.
Grading: 40% mid exam, 35% final exam, 8% special projects, 10% quizzes, 7% problem solving.

Exam Format: problem solving

Acct 5101 Intermediate Accounting I
A-F only, 4 credit(s);
Instructor: Forester, Clayton L
Description: Student may contact the instructor or department for information.

Acct 5102W Intermediate Accounting II
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Tranter, Terry L
Description: Students in class are juniors, seniors, and master's students. While most students are accounting majors, the course is also valuable for students in finance. The class covers the valuation of liabilities and owners' equity accounts, as well as cashflow statements and earnings per share calculations. Students need a thorough background in financial accounting and present value calculations to do well in Acct 5102.
Style: 100% Lecture.
Grading: 47% mid exam, 25% final exam, 19% reports/papers, 9% other evaluation.
Exam Format: Open-ended questions 85+%; essays 10-15%; 4-6 questions per exam; exams are long and run the full class period.

Acct 5102W Intermediate Accounting II
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Biondich, Nick E
Description: Student may contact the instructor or department for information.

Acct 5125 Auditing Principles and Procedures
A-F only, 4 credit(s);
Instructor: Beil, Frank J
Description: Student may contact the instructor or department for information.

Acct 5125 Auditing Principles and Procedures
A-F only, 4 credit(s);
Instructor: Batina, Tom
Description: Student may contact the instructor or department for information.

Acct 5135 Fundamentals of Federal Income Tax
A-F only, 4 credit(s);
Instructor: Gutterman, Paul Gerard
Description: The course objectives are as follows: 1) to provide a historical perspective with respect to the system of income taxation in general and with respect to various specific provisions within the system; 2) to examine the interrelationships between legislative authority (the Internal Revenue Code), judicial and administrative authority; 3) to analyze the structure of the Internal Revenue Code and its provisions with respect to specific areas of the law, primarily with regard to the taxation of individuals; 4) to introduce the reading of case law and other tax authority; and 5) to provide a basic knowledge of tax research tools and techniques. The student will not be a tax expert on completion of the course, but will be familiar with fundamental income tax rules, primarily with respect to individuals, and how the federal tax system works. Although this course is a requirement for undergraduate accounting majors, only a minimal accounting understanding is required as a prerequisite and non-accounting majors are welcome.
Style: 60% Lecture, 15% Discussion. Problems
Grading: 53% mid exam, 30% final exam, 17% special projects.
Exam Format: multiple choice, short essay

Acct 5135 Fundamentals of Federal Income Tax
A-F only, 4 credit(s);
Instructor: Naples, Tammy
Description: Student may contact the instructor or department for information.

Acct 5160 Financial Statement Analysis
A-F only, 2 credit(s);
Instructor: Duke, Gordon Leon
Description: Student may contact the instructor or department for information.
Acct 5160 Financial Statement Analysis
   A-F only, 2 credit(s);
   Instructor: Beil,Frank J
   Description: Student may contact the instructor or department for information.

Acct 5236 Introduction to Taxation of Business
   A-F only, 2 credit(s);
   Instructor: Conlon,Roger John
   Description: Student may contact the instructor or department for information.

Acct 5310 International Accounting
   A-F only, 2 credit(s);
   Instructor: Rayburn,Judy Ann
   Description: Student may contact the instructor or department for information.

Acct 5420 MAcc directed study
   A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: Kallio,Larry Rodger
   Description: Student may contact the instructor or department for information.

Acct 5960 Trends in Accounting
   A-F only, 3 credit(s);
   Instructor: Kallio,Larry Rodger
   Description: Student may contact the instructor or department for information.

Acct 6100 Financial Statement Analysis
   A-F only, 4 credit(s);
   Instructor: Beil,Frank J
   Description: Student may contact the instructor or department for information.

Acct 6101 Financial Accounting II
   A-F only, 2 credit(s);
   Instructor: Shroff,Pervin Keki
   Description: Student may contact the instructor or department for information.

Acct 6160 Accounting for Mergers and Acquisitions, and Derivatives
   A-F only, 2 credit(s);
   Instructor: Beil,Frank J
   Description: Student may contact the instructor or department for information.

Acct 8001 Internal Control
   A-F only, 4 credit(s);
   Instructor: Kallio,Larry Rodger
   Description: Student may contact the instructor or department for information.

Acct 8002 Securities and Exchange Commission (SEC) and Standard Setting
   A-F only, 4 credit(s);
   Instructor: Kallio,Larry Rodger
   Description: Student may contact the instructor or department for information.

Acct 8802 Empirical Research-Capital Markets
   4 credit(s), max credits 8;
   Instructor: Gu,Zhaoyang
   Description: Student may contact the instructor or department for information.

Acct 8812 Information Economics II
   4 credit(s);
   Instructor: Kanodia,Chandra S
   Description: Student may contact the instructor or department for information.

Addiction Studies Credit Certificate Prog/College of Continuing Edu
AddS 4002 Internship in Substance Abuse Counseling I
S-N only, 1-8 credit(s), max credits 8, 4 completions allowed;
Instructor: Rohovit, Julie L
Description: 

AddS 5007 Adolescence and Substance Abuse
A-F only, 2 credit(s);
Instructor: Becher-Ingwalson, Ann M
Description: Student may contact the instructor or department for information.

AddS 5011 Foundations in Addiction Studies
A-F only, 2 credit(s);
Instructor: Van Cleve, Michael
Description: Student may contact the instructor or department for information.

AddS 5011 Foundations in Addiction Studies
A-F only, 2 credit(s);
Instructor: Becher-Ingwalson, Ann M
Description: Student may contact the instructor or department for information.

AddS 5021 Introduction to Evidence Based Practices and the Helping Relationship
A-F only, 2 credit(s);
Instructor: Boisen, Laura Sue
Description: Student may contact the instructor or department for information.

AddS 5021 Introduction to Evidence Based Practices and the Helping Relationship
A-F only, 2 credit(s);
Instructor: Wamsley, Debra S
Description: Student may contact the instructor or department for information.

AddS 5041 Methods and Models I: Motivational Counseling
A-F only, 2 credit(s);
Instructor: Van Cleve, Michael
Description: Student may contact the instructor or department for information.

AddS 5051 Methods and Models II: Cognitive Behavioral Therapy
A-F only, 2 credit(s);
Instructor: Van Cleve, Michael
Description: Student may contact the instructor or department for information.

AddS 5061 Foundations of Group Work
A-F only, 3 credit(s);
Instructor: Rohovit, Julie L
Description: Student may contact the instructor or department for information.

AddS 5071 Foundations of Co-occurring Disorders
A-F only, 2 credit(s);
Instructor: Van Cleve, Michael
Description: Student may contact the instructor or department for information.

AddS 5081 Multicultural Foundations of Behavioral Health
A-F only, 3 credit(s);
Instructor: Wamsley, Debra S
Description: Student may contact the instructor or department for information.

AddS 5091 Assessment and Treatment Planning I
A-F only, 3 credit(s);
Instructor: Van Cleve, Michael
AddS 5091 Assessment and Treatment Planning I
A-F only, 3 credit(s);
Instructor: Wawro, George
Description: Student may contact the instructor or department for information.

AddS 5993 Directed Study
1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Rohovit, Julie L
Description: Student may contact the instructor or department for information.

Aerospace Engineering and Mechanics 107 Akerman Hall

AEM 1905 Freshman Seminar: Aircraft and Spacecraft: Yes, This Is Rocket Science! High-Power Rocketry
OPT No Aud, 2 credit(s), max credits 4;
Instructor: Flaten, James Alfred
Description: Brief description: This hands-on course will take students beyond (Estes-type) "model rocketry" into the realm of "high-power rocketry," building rockets with H-size (or larger) motors, some capable of reaching altitudes of several thousand feet! Attending a day-long launch event with a local high-power rocketry club will be a required class activity for a weekend date (probably in October - primary date and back-up date to be announced at the beginning of the semester). In addition to learning basic rocketry physics, using rocketry computer simulations, constructing high-power rockets, and flying them, this class will include lectures, discussions, and activities associated with the past, present, and future of "real-spaceflight rocketry" for manned and unmanned missions into low-Earth-orbit and beyond. Instructor: Dr. James Flaten is the associate director of the Minnesota Space Grant Consortium, a NASA higher education program whose goals include promoting interest in space science and space exploration. Though housed in the Aerospace Engineering and Mechanics Department, Professor Flaten's academic background is actually in experimental physics and he has taught many physics and astronomy classes in the past. He enjoys using high-power rocketry and high-altitude ballooning as relatively low-cost means of giving students hands-on experience building and flying space-related hardware.
Style: Class time will be spent learning about high-power rocketry and actually building rockets in teams.
Grading: Grading will be about half on individual assignments and about half on your team's rocket project (with associated oral presentations and written documentation).

AEM 2011 Statics
A-F only, 3 credit(s);
Instructor: STAFF
Prerequisites: IT student, Phys 1301, concurrent registration in Math 2374 or equivalent.

AEM 2012 Dynamics
A-F only, 3 credit(s);
Instructor: STAFF

AEM 2021 Statics and Dynamics
A-F only, 4 credit(s);
Instructor: Ketema, Yohannes

AEM 3031 Deformable Body Mechanics
A-F only, 3 credit(s);
Instructor: van Lengerich, Henrik Bernhard
Description: Student may contact the instructor or department for information.

AEM 3100 Software Applications in AEM: Introduction to MATLAB with numerical methods
AEM 3100 Software Applications in AEM: Introduction to SIMULINK for Aircraft Dynamics
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Gebre Egziabher, Demoz
Description: Student may contact the instructor or department for information.

AEM 4000H Honors Research Seminar
S-N only, 0 credit(s);
Instructor: Shield, Thomas William
Description: Student may contact the instructor or department for information.

AEM 4201 Fluid Mechanics
A-F only, 4 credit(s);
Instructor: Longmire, Ellen K
Description: First course in fluid mechanics. Includes stress and strain rate conditions, fluid statics, use of differential and finite control volume analysis with continuity, momentum and energy equations, Bernoulli and Euler equations, vorticity, potential flow, incompressible viscous flow using Navier-Stokes equations, dimensional analysis, pipe flow boundary layers, separation, introduction to turbulence. Student may contact instructor for additional information.

AEM 4295 Problems in Fluid Mechanics
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Topics of current interest. Individual projects with consent of faculty sponsor.

AEM 4301 Orbital Mechanics
A-F only, 3 credit(s);
Instructor: Ketema, Yohannes
Description: The two-body problem. Earth-satellite operations, rocket performance, re-entry dynamics, the space environments, the restricted three-body problem, interplanetary trajectories. Numerical simulations. Elementary spacecraft attitude control. Design project. Student may contact instructor for further information.

AEM 4321 Automatic Control Systems
A-F only, 3 credit(s);
Instructor: Seiler Jr, Peter J
Description: Student may contact the instructor or department for information.

AEM 4331 Aerospace Vehicle Design
A-F only, 4 credit(s);
Instructor: Garrard, William L
Description: Student may contact the instructor or department for information.

AEM 4502 Computational Structural Analysis
3 credit(s);
Instructor: Tadmor, Ellad B
Description: Student may contact the instructor or department for information.

AEM 4581 Mechanics of Solids
3 credit(s);
Instructor: James, Richard D
Description: This course is a basic course in Solid Mechanics and an introduction to Continuum Mechanics. The course will be completely self-contained and there is no required textbook. Reference to relevant works and original sources will be announced during class. The goal is to transmit an "insider's view" of solid mechanics: what is really behind the choice of equations and methods? What is the connection with experiment? What can you do with it? The exposition in this course will be quite traditional, but examples will be chosen to reflect modern trends in science and technology. Outline 1. One-dimensional continuum mechanics (a) Kinematics and the balance of mass (b) Forces and the balance of momentum (c) Balance of energy (d) Work, energy and stability (e) Linear
wave propagation in bars (f) Nonlinear wave propagation: shocks in solids (g) Thermoeelastic effects in bars 2. Strings and rods (a) Equations of motion of a string (b) Euler-Bernoulli theory (c) Stability and buckling 3. Three dimensional elasticity (a) Kinematics of homogeneous deformations (b) Strain and principal strains (c) Stress and principal stresses (d) The linear and nonlinear theories of elasticity 4. Fracture mechanics (a) Fracture criteria (b) Fracture tests 5. Applications: shape memory materials, DNA as a rod, viruses, MEMS devices, energy conversion

Style: 100% Lecture.

AEM 4595 Problems in Mechanics and Materials
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Topics of current interest. Individual projects with consent of faculty sponsor.

AEM 4602W Aeromechanics Laboratory
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Shield, Thomas William
Description: Student may contact the instructor or department for information.

AEM 4796 Professional Experience
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

AEM 5251 Computational Fluid Mechanics
A-F only, 3 credit(s);
Instructor: Nompelis, I
Description: Student may contact the instructor or department for information.

AEM 5321 Modern Feedback Control
3 credit(s);
Instructor: Jovanovic, Mihailo
Description: Student may contact the instructor or department for information.

AEM 5401 Intermediate Dynamics
A-F only, 3 credit(s);
Instructor: Ketema, Yohannes
Description: Student may contact the instructor or department for information.

AEM 5451 Optimal Estimation
A-F only, 3 credit(s); [MATH 2243 or STAT 3021 or equiv], [4321 or EE 4231 or ME 5281 or equiv] or instr consent Credit will not be granted if credit has been received for: EE 5251;
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

AEM 5501 Continuum Mechanics
3 credit(s);
Instructor: Fosdick, Roger L
Description: Student may contact the instructor or department for information.

AEM 8000 Seminar: Aerospace Engineering and Mechanics
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Shield, Thomas William
Description: Student may contact the instructor or department for information.

AEM 8201 Fluid Mechanics I
3 credit(s);
Instructor: Longmire, Ellen K
Description: Student may contact the instructor or department for information.
AEM 8203 Fluid Mechanics III  
3 credit(s);  
Instructor: Mahesh, Krishnan  
Description: Student may contact the instructor or department for information.

AEM 8231 Molecular Gas Dynamics  
3 credit(s); [4201 or equiv], [4203 or equiv], [ME 3324 or equiv] Credit will not be granted if credit has been received for: ME 8361;  
Instructor: Girshick, Steven L  
Description: Student may contact the instructor or department for information.

AEM 8442 Navigation and Guidance Systems  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.

AEM 8495 Advanced Topics in Aerospace Systems  
A-F only, 1-4 credit(s), max credits 8, 8 completions allowed;  
Instructor: STAFF  
Description: The aim of the course is to learn how to exploit information contained in data collected from a dynamical system to determine mathematical models describing the system's dynamical behavior. Methods of system identification are based on the theoretical principles of systems and signals. While the focus of the course is primarily on linear dynamical systems (described by a set of linear differential equations), the course will also cover general considerations about how to treat nonlinear. The system identification principles and methods apply to a wide range of areas. Examples used in the course will cover problems from current research in aerospace (e.g. miniature helicopter, micro-air vehicle) as well as problems from other areas like robotics, neurosciences, and economics. The primary textbook used for the course is "System Identification: Theory for the User" by L. Ljung. The other texts used as references in the course are listed in the reference section.

AEM 8595 Selected Topics in Mechanics and Materials  
1-4 credit(s), max credits 8, 8 completions allowed;  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.

Aerospace Studies 3 Armory

Air 1000 Leadership Laboratory  
S-N only, 1 credit(s);  
Instructor: Peterson, Major Chris  
Description: Student may contact the instructor or department for information.

Air 1104 Introduction to the Air Force Today I  
A-F only, 1 credit(s);  
Instructor: Bliss, Adam J  
Description: The Foundations of the United States Air Force Air 1104 introduces the mission and organization of the Air Force, officerhood and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and introduction to communication skills.  
Style: 65% Lecture, 15% Film/Video, 10% Discussion, 10% Student Presentation.  
Grading: 25% mid exam, 25% final exam, 13% special projects, 12% quizzes, 25% class participation.  
Exam Format: Short Answer / Multiple Choice

Air 1204 History of Airpower and Communication Skills  
A-F only, 1 credit(s);  
Instructor: Bliss, Adam J  
Description: AIR 1205 is a survey course designed to examine general aspects of air and space power through a historical perspective. This course covers a time period from the first balloons and dirigibles to the airpower in the Cold War. Historical examples are provided to extrapolate the development of Air Force capabilities, functions, and doctrine to demonstrate the evolution of what has become today's USAF air and space power. As a whole, this course provides the students with a knowledge level of understanding for the general element and employment of air and space power from an institutional, doctrinal, and historical perspective. Students will
also give several speeches and write several papers to further their communication abilities.

**Style:** 65% Lecture, 15% Film/Video, 10% Discussion, 10% Student Presentation.

**Grading:** 25% mid exam, 25% final exam, 13% special projects, 12% quizzes, 25% class participation.

**Exam Format:** Short Answer and Multiple Choice

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**Air 3301 Air Force Leadership, Quality, and Communication**

**A-F only, 3 credit(s);**

**Instructor:** STAFF

**Description:** AS 3301 is a study of leadership, quality management fundamentals, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory (cadets only) complements this course by providing advanced leadership experiences in officer-type activities, and gives the students an opportunity to apply leadership and management principles taught in this course. Target audience is first semester meet juniors.

**Style:** 45% Lecture, 30% Discussion. Video tapes

**Grading:** 20% reports/papers, 40% quizzes, 20% in-class presentation, 20% class participation. 40% tests

**Exam Format:** Multiple choice, T/F, short answer

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**Air 3401 National Security Policy**

**A-F only, 3 credit(s);**

**Instructor:** STAFF

**Description:** AS400 examines the national security process, regional studies, advanced leadership ethics, Air Force doctrine, and military justice. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A Leadership Laboratory complements this course by providing advanced leadership experiences, giving the students the opportunity to apply the leadership and management principles of this course. Target audience is first semester seniors preparing to enter active duty as commissioned Second Lieutenants in the US Air Force. Classes are a combination of lecture and guided discussion. Class time: 50% lecture, 30% discussion, 20% student briefings. Work load: 70 pages of reading per week, 2 exams, 3 papers, 2 oral presentations. Exam format: essay, short answer, matching.

**Style:** 50% Lecture, 30% Discussion. student briefings

**Grading:** 25% mid exam, 25% final exam, 30% reports/papers, 20% in-class presentation.

**Exam Format:** essay, short answer, matching

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**African American and African Studies 808 Social Sciences Tower**

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**Afro 1012 Black Worlds in Global Perspective: Challenges and Changes**

3 credit(s); Meets CLE req of Global Perspectives

**Instructor:** Onishi,Yuichiro

**Description:** This course explores the dynamic processes of the dispersal of Africans and their descendants throughout the world to develop strategies to engage with "the practice of diaspora." Our approach is historical, examining why and how this phenomenon of dispersion occurred and changed over a long period of time. Such a sweeping historical perspective allows us to: (1) assess the relationship between Africa and the world at large both before and after the "transatlantic moment" of the fifteenth century; (2) explore Africa's place in the modern world and how it continues to play a critical role in it; (3) examine the transformation of identities and struggles for Africentricity and pan-Africanism in the New World. In addition, this course is interested in exploring the possibilities of the African diaspora, as well as challenges facing the communities of the African diaspora in such places as the United States and other parts of the Americas in the contemporary world. Throughout the semester, we will searchingly look for ways to reconnect with Africa and myriad communities of the African diaspora in new ways. Our methods of inquiry include personal reflection, group work, written assignments, and class discussion. Students who are interested in international Black history, Black radicalism, pan-Africanism, and questions of identity and politics are encouraged to take this course.

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 60% reports/papers, 5% attendance, 10% reflection paper, 15% in-class presentation, 10% class participation.

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**Afro 1021 Introduction to Africa**

4 credit(s); Meets CLE req of Global Perspectives

**Instructor:** Coifman,Victoria Bomba

**Description:** This course is an introduction to the people of the African continent and incorporates fascinating findings from geography, archaeology, history, literature, economics and politics. A highlight of the semester is our participation in the US World Food Day Conference in October. The class actively participates in the televised events of the day and students especially enjoy this segment of our work. The course provides solid background information about the continent's past and present and gives the context for understanding the serious issues facing Africans today - in areas of government, education, poverty, health and disease,
environment, international relations. While learning basic and theoretical information, we are preparing for practical activities in the
future. African peoples have faced increasing changes in the last 500 years. The African "Diaspora" begun centuries ago, brought
Africans and their descendents to new lives on all the continents and newcomers are adding to the diversity of this State even now. In
Africa itself, long distance contacts and trade in commodities and the periods of the Trans-Saharan and Atlantic slave trade (16th to
19th centuries) and the Indian Ocean slave trade, were followed by the era of European colonial rule from the late 19th century to the
early 1960s (for most of Africa).

Style: 50% Lecture, 30% Discussion. These bring visuals and new perspectives to our understanding of a lively continent.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% special projects.
Exam Format: short identifications and essay - there are choices in all parts of the exam to allow for factual information and students' experiences and creativity.

Afro 1023W Introduction to African World Literature
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Githire,Njeri R
Description: Student may contact the instructor or department for information.

Afro 1902 Freshman Seminar: Social and Cultural History of Blacks in Sports
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Atkins,Keletso E
Description: This course examines the social and cultural contexts surrounding eras of athletes such as Jack Johnson, Jackie Robinson, Joe Louis, Jesse Owens, Althea Gibson, Wilma Rudolph, Muhammad Ali, Michael Jordan, and Tiger Woods. The impact of these athletes on national and international events is also examined. The course also explores periods when it was not uncommon for black entertainers and athletes to become involved in politics and community activism.

Afro 1902 Freshman Seminar: Black Men: Representations and Reality
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Mayes,Keith A
Description: Student may contact the instructor or department for information.

Afro 3001 West African History: Early Times to 1800
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Coifman,Victoria Bomba
Description: This course will examine the story of some of the people of this region, especially through the changes and developments which took place among several individual groups. The emphasis will be upon understanding well, the events of some "representative" people's histories, rather than attempting to understand what occurred in each and every group. There are too many groups and activities to study in a semester. Main themes of the course will include the family or lineage as the building block of all other institutions, the development of centralized political authority or states in West Africa, and the organization of people who did not adopt the state idea. We will examine economic developments, the spread of Islam, and the appearance of Europeans off certain coastal areas. Here a new frontier or border formed, one of hundreds in West African History. As with all other West African borders, the operational institutions of the African-European frontier were mainly being set by West African mechanisms. Until well into the nineteenth century, therefore, European (and American) traders were paying tribute and were in client, guest, or "stranger" relations with their West African patrons, hosts, or "landlords".

Afro 3108 Black Music: A History of Jazz
3 credit(s);
Instructor: Williams,Yolanda Y
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The History of Jazz course looks at the development of America's true "classical" musical form. We will trace the roots of Jazz from West Africa to the spirituals and work songs of the African slave through Blues to the first form of Jazz--New Orleans Dixieland. The other jazz forms of Swing, Bebop, and Cool through Neo-Classicism will also be studied. Because the course focuses primarily on the social, economic, and political impact on jazz, and vice versa, it is a perfect course for both the musician and the non-musician. Musicians will appreciate the developmental aspects of this once brand-new musical form and will gain a better understanding of how musical elements such as form, instrumentation, etc., and life interact and evolve.
Style: Online
Grading: 15% final exam, 25% special projects, 20% quizzes, 20% written homework, 20% class participation. -3 optional extra credit activities (maximum 5% of course grade)
Exam Format: Online exam.
Afro 3112 In the Heart of the Beat: the Poetry of Rap
A-F only, 3 credit(s);
Instructor: Pate, Alexs D.
Description: This course is designed to increase the understanding of contemporary African American poetry as expressed by popular culture contributors. Students are asked to analyze and evaluate some of the poems that are used in the music of rap in the context of African American literature, American culture and aesthetics in general. Students must read 3-5 texts. Students must write a journal about each book. These journals, class participation through group and individual recitation along with a final academic paper comprise the evaluative components of this course.

Afro 3141 Africa
3 credit(s); Credit will not be granted if credit has been received for: GEOG 3141;
Instructor: STAFF
Description: Geography of Africa introduces students to the human and environmental diversity of Africa, and examines the effects of internal and external forces on the spatial organization of Africa economies and societies. Geographic (case) studies are used to discuss important developmental issues, or changes that reflect modern trends and gender conditions. We examine selected regions and topics or themes in depth rather than to present general profiles of individual nations. This approach highlights the importance of culture in environmental and social change. Handouts (including current news reports), lecture units, slides/video documentaries and class discussions are used to provide the latest information available.
Style: 70% Lecture, 30% Discussion.
Grading: 20% mid exam, 40% final exam, 20% reports/papers, 20% other evaluation. 2 map-based quizzes, 10% each
Exam Format: mixed

Afro 3432 Modern Africa in a Changing World
4 credit(s); Credit will not be granted if credit has been received for: HIST 3432;
Instructor: Isaacman, Allen F
Description: Student may contact the instructor or department for information.

Afro 3592W Introduction to Black Women Writers in the United States
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Pate, Alexs D.
Description: This course seeks to explore the literary production of North American Black women from diverse backgrounds and perspectives. Through their varied and common experiences of Black females living in a white-male-dominated culture, we will endeavor they understand the social construction of race and gender, as well as, their intersection with class and social-economic dynamics. In the Black cultural and literary traditions of truth narratives, and transparency, these women share their historical, cultural, and contemporary experiences and insights with verve and authority. At the heart of their literary pursuit is the aspiration to live a more informed, enriched, and inspired life. In so doing, these writers offer us important lessons about creativity, hope, empowerment, courage, and self-expression.

Afro 3597W Introduction to African American Literature and Culture I
4 credit(s); credit will not be granted if credit already received for: Afro 3591W; Credit will not be granted if credit has been received for: ENGL 3597W; Meets CLE req of Writing Intensive
Instructor: Wright, John S
Description: African Americans are "America's metaphor" Richard Wright declared, posing both a riddle and a riff - a wry reversal of conventional perspectives. Wright intimated that we might discover in the shadows of American literary life our brightest mirrors. We might thereby see ourselves--and the paradoxes and potentialities of our national experience--through the world of words and images conjured up over the past two centuries by African American writers. African American literature is a heavily "committed" tradition with both ancient African and Euro-American antecedents. Much of its mythological system and special "equipment for living" has been built on the communal base of the most elaborate vernacular tradition in American English--epic tales and legends, spirituals, blues, work songs, ballads, rhymed toasts, riddles, proverbs, jazz, jokes, and the rhetoric of rap music. Over the course of two semesters, in exploring the intricate world of cultural myth and metaphor that has resulted, our own caravan will lead us forward from pre-modern Africa itself and the era of the earliest African American literary works - 18th and 19th century slave autobiographies, oral folk texts, abolitionist essays, orations and poems-on to the contemporary period of literature marked by burgeoning diversity and modernist innovation, by growing critical acclaim, and by politico-aesthetic movements such as the Jazz Age Harlem Renaissance and the Black Arts Movement of the 1960s and 70s.
Style: 40% Lecture, 40% Discussion, 5% Laboratory. outside film viewings and online assignments
Grading: 83% reports/papers, 17% quizzes.
Exam Format: Quizzes are multiple choice and short answer

Afro 3864 African American History: 1619 to 1865
Afro 4593 The African American Novel
3 credit(s); Credit will not be granted if credit has been received for: ENGL 4593;
Instructor: Wright, John S
Description: AFRO /ENGL 4593: The African American Novel Since romanticism and literary abolitionism converged in the 1850s, African American storytellers have discovered strategic uses for the modern novel -- making it both an ethical instrument and a vessel of ancestral traditions. Inclined initially more to social realism than to fantasy, romance, or surrealism, black American novelists have created a "committed" literature rooted in the view that the images and ideas of the novel are potential weapons in the struggle for social justice and social transformation. Yet an ever-ready countercurrent of comedies, satires, historical fables, and speculative fictions conjured up by African American novelists express their indebtedness also to philosophical and folk traditions that view literature as a ritualistic and healing exploration of human possibility and the transmundane -- of alternate worlds and worldviews. This course explores these African American novelistic traditions -- plot patterns, character types, settings, symbols, themes, movements, and mythologies. From the little known novelistric worlds of late nineteenth century preachers and journalists to Harlem Renaissance and mythologies. From the little known novelistric worlds of late nineteenth century preachers and journalists to Harlem Renaissance
political thrillers and urban picaresques to internationally renowned neo-slave narratives, Black Arts magic realism, and philosophical metafictions from the late twentieth century, we will steer a course through the creative and critical torrents of the modern black imagination. Because these writers have been profoundly concerned with social and historical "truth," we will find that the materials and techniques of many African American novels, while dramatizing the conflicts and consciousness of the individual, attempt to "reconstruct" emplotmentally the experiences and historical consciousness of the group. To complement lectures, during regular class meetings we will rely periodically on filmed interviews or documentaries, as well as on a variety of informal small groups to help focus your attention on the texts and concepts at hand, to strengthen your abilities to articulate and share what you have learned, and to provide another gauge of how successfully you are mastering various elements of the course. The course is designed for advanced undergraduates and graduate students. Written assignments and grading options as follows: Critical Research Paper: Each student is required to write a 10-12 page typed research paper (15-20 pages for graduate students) examining the critical reception (original reviews, etc.), interpretive controversies, and current standing of one of the course novels Grades: Option A - 40% journal, 40% term paper, 10% one-page rationales, 10% class participation Option B - 30% short paper, 50% term paper, 10% rationales, 10% class participation

Afro 5191 Seminar: The African American Experience in South Africa
3 credit(s);Credit will not be granted if credit has been received for: HIST 5438;
Instructor: Atkins, Keletso E
Description: Student may contact the instructor or department for information.

Afro 5625 Black Women Writers in the Diaspora
3 credit(s);Meets CLE req of Writing Intensive
Instructor: Githire, Njeri R
Description:

Agricultural, Food, and Environmental Education  146 Ruttan Hall

AFEE 1001 Introduction to Agricultural Education and Extension
1 credit(s);
Instructor: Leising, James G
Description: AFEE 1001 is an introduction to the Agricultural Education major and orientation to career opportunities in the two specializations of the major: Leadership and communications and agricultural education teaching. In the process of learning about the field of agricultural education, some of the major topics include: history, current issues and programs, career opportunities, informational interviews and networking with professionals in the field and understanding requirements of the major.

AFEE 2051 Current Technical Competencies
3 credit(s);
Instructor: Swiggum, James Frederick
Description: Student may contact the instructor or department for information.

AFEE 2221 People Skills for Leadership
A-F only, 3 credit(s);
Instructor: Peterson, Roland L
Description: Student may contact the instructor or department for information.

AFEE 3096 Experiential Learning: Production and Business
1-8 credit(s), max credits 12, 12 completions allowed;
Instructor: Buhr, Brian L
Description: Student may contact the instructor or department for information.

AFEE 3096 Experiential Learning: Production and Business
1-8 credit(s), max credits 12, 12 completions allowed;
Instructor: Greiman, Brad
Description: Student may contact the instructor or department for information.

AFEE 3112 Building Construction Technology
A-F only, 3 credit(s);Credit will not be granted if credit has been received for: OLPD 3412;
Instructor: Swiggum, James Frederick
Description: Student may contact the instructor or department for information.
AFEE 3221 Communication for Agriculture, Food, and the Environment
A-F only, 3 credit(s);
Instructor: Swenson, Rebecca Dean
Description: Student may contact the instructor or department for information.

AFEE 3361 World Development Problems
3 credit(s); Credit will not be granted if credit has been received for: AFEE 5361; Meets CLE req of Global Perspectives
Instructor: Plonski, Patrick John
Description: Student may contact the instructor or department for information.

AFEE 511W Agricultural Education: Methods of Teaching
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Greiman, Brad
Description: The goal of this course is to provide an overview of instructional strategies utilized by agricultural education instructors in secondary schools, and by adult educators in agricultural businesses, organizations, and government agencies. This course will examine the teaching and learning process, and is intended to assist agricultural education undergraduate students in developing effective teaching skills. Students will learn techniques necessary for designing instruction, motivating learners, leading the educational process, and managing the learning environment. The problem-solving approach to teaching is stressed for a major portion of the course and students have the opportunity to practice the delivery of instruction in a performance-based format.
Style: 40% Lecture, 30% Discussion, 30% Laboratory.

AFEE 5231 Agricultural Education Curriculum K-12
A-F only, 2 credit(s);
Instructor: Leising, James G
Description: Student may contact the instructor or department for information.

AFEE 5280 Current Issues for the Beginning Agricultural Education Teacher
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Greiman, Brad
Description: Student may contact the instructor or department for information.

AFEE 5361 World Development Problems
3 credit(s); Grad students only Credit will not be granted if credit has been received for: AFEE 3361;
Instructor: Plonski, Patrick John
Description: Student may contact the instructor or department for information.

AFEE 5697 Teaching Internship: School and Classroom Setting
2 credit(s);
Instructor: Leising, James G
Description: Student may contact the instructor or department for information.

AFEE 5993 Directed Study in Agricultural Education and Extension
1-9 credit(s), max credits 9, 1 completion allowed;
Instructor: Greiman, Brad
Description: Student may contact the instructor or department for information.

AFEE 5993 Directed Study in Agricultural Education and Extension
1-9 credit(s), max credits 9, 1 completion allowed;
Instructor: Leising, James G
Description: Student may contact the instructor or department for information.

AFEE 5995 Integrating Paper--Master of Education: Agricultural and Extension Education
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Greiman, Brad
Description: Student may contact the instructor or department for information.

AFEE 5995 Integrating Paper--Master of Education: Agricultural and Extension Education
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Leising, James G
Description: Student may contact the instructor or department for information.

### Agronomy and Plant Genetics 411 Borlaug Hall

#### Agro 1093 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Cardwell, Vernon Bruce
Description: Student may contact the instructor or department for information.

#### Agro 1103 Crops, Environment, and Society
4 credit(s);
Credit will not be granted if credit has been received for: AGUM 2222; Meets CLE req of Environment
Instructor: Sheaffer, Craig Charles
Description: Life on earth is dependent on plants. Learn about food, fiber, and medicinal plants that are important to our society, their impact on environmental quality, and how they are improved and cultured. Discuss currently important topics such as genetic engineering, food safety, water quality, organic agriculture, and species preservation. In a laboratory, learn about how plants grow, and about food products derived from plants. This course is intended for undergraduate majors and non-majors interested in a general understanding of food and fiber production from crop plants. In the class, we use several approaches to learning, such as case studies, and minimize lecturing. We promote discussion by viewing videos and reviewing recent newspaper and magazine articles.
Style: 30% Lecture, 40% Discussion, 20% Laboratory. Problem solving
Grading: 40% mid exam, 20% final exam, 20% laboratory evaluation, 20% problem solving.
Exam Format: Short answer

#### Agro 1660 First-Year Colloquium/Experience in Agroecosystems Analysis
A-F only, 2 credit(s); Meets CLE req of Environment
Instructor: Anderson, James Allan
Description: Agroecosystems and their impacts on the environment, landscapes, and rural communities. Students develop a course plan within their major, explore career options, and increase their familiarity with the department, its history, and its faculty/staff. Field trips, discussions, readings, reflective writings.

#### Agro 1901 Topics: Freshman Seminar: Evaluating Starvation: Revisiting Malthus
A-F only, 3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Environment
Instructor: Porter, Paul M
Description: Student may contact the instructor or department for information.

#### Agro 1942 Topics: Freshman Seminar: By the Harvest You Shall Live
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Cardwell, Vernon Bruce
Description: Student may contact the instructor or department for information.

#### Agro 4093 Directed Studies for Advanced Students
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Cardwell, Vernon Bruce
Description: Student may contact the instructor or department for information.

#### Agro 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Brakke, Mary Patricia
Description: Student may contact the instructor or department for information.
Instructor: Cardwell, Vernon Bruce  
Description: Professional experience in agribusiness firms or government agencies achieved by supervised practical experience; evaluative reports and consultations with faculty advisers and employers.

**Agro 4097 Undergraduate Research Thesis**

A-F only, 1-6 credit(s), max credits 12;  
Instructor: Smith, Kevin Paul  
Description: Students work with a faculty member to develop a research project, carry out the research, and write a thesis.  
Style: Regular meetings are scheduled with instructor.  
Grading: 100% reports/papers.

**Agro 4103 World Food Problems**

3 credit(s); Jr or sr or grad  
Credit will not be granted if credit has been received for: APEC 4103; Meets CLE req of Global Perspectives  
Instructor: Porter, Paul M  
Description: This course provides a multi-disciplinary look at problems (and some of the possible solutions) affecting food production, storage, and utilization. Presentations and discussions introduce and discuss sometimes conflicting views on population control, use of technology, as well as the ethical and cultural values of people in various countries of the world. Emphasis is placed on the need for governments, international assistance agencies, international research and extension centers, as well as the private business sector to assist in solving these complex problems. Students can enroll in either Agro 4103 or ApEc 4103. Previous background in any of the disciplines is not required, but students should expect upper division and/or graduate level assignments.  
Style: 33% Lecture, 33% Discussion.  
Grading: 60% reports/papers, 25% special projects, 15% class participation.

**Agro 4605 Management Strategies for Crop Production**

3 credit(s);  
Instructor: Cardwell, Vernon Bruce  
Description: Crop management situations/needs in various climate zones, soil types, from seed selection to crop storage. Focus is on cropping systems involving corn, soybeans, small grains, and forages. Emphasis on long-term productivity, profitability, and sustainability. Instruction includes lecture and field trips.

**Agro 4660 Senior Capstone**

A-F only, 2 credit(s);  
Instructor: Muehlbauer, Gary John  
Description: This course examines the complexities of agricultural issues through a series of discussions. The course also engages students in exercises and discussions that integrate previous educational situations. This course is linked to undergraduate internships and other experiential learning opportunities such as thesis or direct studies and service learning. Written and oral assignments are based on internships or other learning experiences.  
Style: 10% Lecture, 90% Discussion.  
Grading: 50% reports/papers, 30% in-class presentation, 20% other evaluation. class discussion

**Agro 4888 Issues in Sustainable Agriculture**

2 credit(s);  
Instructor: Sheaffer, Craig Charles  
Description: Study the social, economic, political and environmental aspects of a sustainable agriculture through discussions with experts in the field. Specific topics can include: the history of agriculture and the family farm, government farm policy, the importance of biodiversity for healthy landscapes, rural communities, quality of life, community supported agriculture, organic agriculture, landscape health and non-profit organizations. Teaching approaches will include student, faculty and producer-led discussions. The course will include on-farm visits. Target audience: non-majors and majors interested in sustainable agriculture.

**Agro 5311 Research Methods in Crop Improvement and Production**

S-N only, 1 credit(s);  
Instructor: Anderson, James Allan  
Description: Demonstrations and discussions of techniques in crop improvement and/or production research. Presentations integrate biotechnology with traditional breeding methods; production sessions emphasize ecologically sound cropping systems.

**Agro 5999 Special Topics: Workshop in Agronomy**

1-6 credit(s), max credits 6, 3 completions allowed;  
Instructor: Porter, Paul M
Description: Student may contact the instructor or department for information.

**Agro 5999 Special Topics: Workshop in Agronomy**
3 credit(s), max credits 6, 3 completions allowed;
Instructor: Cardwell, Vernon Bruce
Description: Student may contact the instructor or department for information.

**Agro 5999 Special Topics: Workshop in Agronomy: Evolution of Crop Plants**
1-6 credit(s), max credits 6, 3 completions allowed;
Instructor: Morrell, Peter Laurent
Description: Student may contact the instructor or department for information.

**Agro 8023 Evolution of Crop Plants**
A-F only, 3 credit(s);
Instructor: Morrell, Peter Laurent
Description: Evolution of Crop Plants is a multidisciplinary examination of crop domestication and improvement for graduate students in the life sciences. The four units of the course include: 1) Origins of Agriculture, 2) Methods for Understanding Domestication and Improvement, 3) The Genetic Basis of Agronomic Adaptations, 4) Twenty-first Century Plant Domestication.
Style: 20% Lecture, 5% Film/Video, 60% Discussion, 10% Laboratory, 5% Guest Speakers.
Grading: 25% mid exam, 20% final exam, 25% quizzes, 10% written homework, 20% in-class presentation.

**Agro 8270 Graduate Seminar**
A-F only, 1 credit(s); Grad major in [applied plnt sci or agro or ent or hort or plnt brdg or plnt path or soil] or instr consent
Credit will not be granted if credit has been received for: HORT 8270;
Instructor: Wyse, Donald L
Description: Student may contact the instructor or department for information.

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**American Indian Studies**  19 Scott Hall

**Amln 1001 American Indian Peoples in the United States**
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: This course is intended to give students a general overview of the contemporary and historic experiences of American Indian peoples in the United States and Canada. It challenges the dominant culture's stereotypes and its unthinking assumptions about American Indian people in the past and present. It shows how the peoples of America's First Nations engaged the presence and representations of foreigners in their midst through acts of resistance, rebellion, accommodation, and innovation. In the process, it illustrates the great diversity of tribal cultures and histories in North America, and it gives evidence of this in the areas of identity, work, philosophy, politics, society, language, religion, literature, and the arts.

**Amln 1003 American Indians in Minnesota**
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: McKay, Neil Troy
Description: The course will focus in particular on the history, culture, and lived experience of American Indian people in the state of Minnesota. This course will explore how Anishinaabe (Ojibwe) and Dakota people have represented their lives and histories through film, music, oral traditions and written texts. It also includes some work by non-Indian scholars which focus on the distinctive cultural, philosophical, and linguistic perspectives of Anishinaabe and Dakota peoples. The course invites local Dakota and Ojibwe artists, elders, and scholars to speak on their own experiences. It is particularly interested in revealing the students' tribal pedagogical and epistemological perspectives or "ways of knowing" as practiced by Indian people in Minnesota today and in the past. This course will introduce students to the humanities as understood within the intellectual perspectives and methodologies of the Dakota and Ojibwe, in particular, and American Indian Studies, more generally. Since these perspectives fall outside the western humanities tradition, this course offers a culturally unique and tribally based perspective on subject matter in the humanities, namely literature, art, music, philosophy and language.
Style: 40% Lecture, 30% Discussion. video, guest speakers
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 10% class participation, 30% other evaluation. attendance, readings
Exam Format: question and answer, open ended, true false

**Amln 3201W American Indian Literature**
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Meland,Carter  
Description: How do you creatively respond to the transformations and deformations introduced into Native America by the colonizing cultures of Europe and Euroamerica? In this course we examine how a select group of American Indian writers creatively respond to the experience of colonization in the narratives they imagine. This question is not aimed exclusively at American Indian writers though, nor is it even more generally aimed only at Indian people. Rather this question about colonization is aimed at everyone living here now: How do you (you sitting there reading this statement) creatively respond to the transformations and deformations introduced into Native America by the colonizing culture of Euroamerica? This course invites you to think about this question and this writing, even if you have never have before. In class discussions we will examine how various writers approach this question and we will familiarize ourselves with the ideas, themes, and tools Native writers use through close readings of their works. In addition to examining the works we will also examine ways the various works ask us to consider and reconsider our own experiences of living in North America. Your responses to the works and our guiding question will be explored, examined, and developed in class discussions, a variety of short writing assignments, and in a final research essay. You will read four or five books for the course as well as a half-dozen or so short readings. As the course is Writing-Intensive you will also do about 40 pages of writing.

Style: 10% Lecture, 90% Discussion.  
Grading: 80% reports/papers, 20% quizzes.

**Amln 3201W American Indian Literature**  
3 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive  
Instructor: Power,Susan Mary  
Description: Student may contact the instructor or department for information.

**Amln 3301 American Indian Philosophies**  
4 credit(s);Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: STAFF  
Description: The purpose of this course is to introduce students to the philosophical thought and spiritual beliefs of native peoples of North America. Students will examine a broad spectrum of issues which influence the worldview of native people on this continent, including European contact and thought. Students may find some of the issues to be controversial and personally challenging, however, a thorough discussion of the impact of European influences is important to understanding native people's resistance and survival. Finally, students will also explore the ways in which photographs are understood in meaningful ways, and more specifically, it inquires into whether American Indian cultures engage processes of photographic representation through distinct aesthetic standards and practices. 4) In doing so, it takes a critical look at how the appearance and meaning of photographs are related not only to the cultural contexts in which they are produced, but also to the agencies of those who stand behind their making. Special attention is paid to some of the intended as well as unintended ideological and political consequences of photographic image-making in historical settings dominated by colonialism and its gaze.

Style: 60% Lecture, 20% Discussion. Group work  
Grading: 33% mid exam, 33% final exam, 17% reports/papers, 17% class participation.  
Exam Format: The exams will be a take home essay.

**Amln 3303 American Indians and Photography**  
3 credit(s);Credit will not be granted if credit has been received for: AMIN 5303;Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: Albers,Patricia  
Description: This course is an historical overview of photographic representations in which American Indian people have been the central subjects. 1) It entails a study of the subtle, complex, and ever-changing relationships between those who take, pose for, and view pictures of American Indians. 2) It considers how the social contexts and purposes of picture-taking influence the content, composition, and coding of images which make up the field of American Indian photographs. 3) It gives attention to the diverse and often contradictory ways in which photographs are understood in meaningful ways, and more specifically, it inquires into whether American Indian cultures engage processes of photographic representation through distinct aesthetic standards and practices. 4) In so doing so, it takes a critical look at how the appearance and meaning of photographs are related not only to the cultural contexts in which they are produced, but also to the agencies of those who stand behind their making. Special attention is paid to some of the intended as well as unintended ideological and political consequences of photographic image-making in historical settings dominated by colonialism and its gaze.

Style: 40% Lecture, 40% Discussion. reading and studying photographs  
Grading: 60% reports/papers, 40% special projects.

**Amln 3402 American Indians and the Cinema**  
A-F only, 3 credit(s);Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: Meland,Carter  
Description: In American Indians and the Cinema, we examine historical and contemporary representations of American Indian peoples in film, the power inequities reflected in those representations, and American Indian resistance to those representations. We will ask ourselves how have particular images of Indians in the movies served the interests of an American nationalist agenda rather than the interests of Native individuals and nations themselves. The course aims to make such questions of the power of representation clear to students and offers the tools to engage in a critique of conventional cultural representations of American Indian
people, as well as, more critically, exposing them to an emerging body of work by American Indian filmmakers asserting their own authority in controlling their images and offering their stories to the viewing world at large. The course addresses ideas of diversity and social justice in the U.S. by exploring how films by American Indian filmmakers offer a differing idea of what American Indian experience has been and is—and ultimately examines the development of an American Indian "aesthetic" by Native filmmakers that is grounded in the historical and ongoing cultural viability of Native peoples. Students taking the course focus on developing a critical vocabulary for understanding both what film is and how it has historically represented American Indian peoples as well as exploring how these representations have changed, or not, in response to changing historical/social contexts. Through examinations and papers students will engage in the task of articulating their critical insights concerning the films and the contexts they emerge from and reflect on.

**Style:** 10% Lecture, 40% Film/Video, 40% Discussion, 10% Student Presentation.

### AMin 3409 American Indian Women: Ethnographic and Ethnohistorical Perspectives

3 credit(s); Credit will not be granted if credit has been received for: AMin 5409; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** Lawson, Angelica

**Description:**

### AMin 3701 Ojibwe Culture and History

3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** Jones, Dennis

**Description:** An introductory overview of Ojibwe culture, history, beliefs, and traditions, including philosophy and world view. The course is presented in four parts, with a test and a paper due at the completion of each part.

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 20% final exam, 40% reports/papers, 40% quizzes.

**Exam Format:** Multiple choice; true/false; and matching

### AMin 3711 Dakota Culture and History

3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** STAFF

**Description:** This course focuses on Dakota culture and history. Our emphasis will be on the four bands of the Santee Dakotas: the Mdewakantons, Wahpekutes, Wahpetons, and the Sissetons. The content of the course will be regionally based, that is, we will study primarily the Dakota bands located in Minnesota and eastern South Dakota. This course will introduce you to many aspects of Dakota culture. We will first begin with a historical overview of the Dakota people, this section will lead us to a significant event in Dakota History: the Uprising/War/Conflict of 1862. As you learn about Dakota history, you will also become aware of the culture of the Santee Dakota. This will involve oral history and narratives, music and dance, artistic expression, language, and discussions of contemporary issues relevant to the Dakota people. Target audience: anyone interested in American Indian Studies.

**Style:** 10% Lecture, 60% Discussion.

**Grading:** 20% mid exam, 20% final exam, 40% reports/papers, 10% in-class presentation, 10% class participation.

**Exam Format:** Multiple Choice, Essay

### AMin 3871 American Indian History: Pre-Contact to 1830

3 credit(s); Credit will not be granted if credit has been received for: Hist 3871; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** Phillips, Katie

**Description:** Student may contact the instructor or department for information.

### AMin 4501 Law, Sovereignty, and Treaty Rights

3 credit(s);

**Instructor:** Wilkins, David E

**Description:** This course introduces the student to U.S. domestic policy and federal law as it pertains to American Indian peoples. First, we engage in a critical analysis of the interaction between the three principal actors--Indigenous nations, the Federal Government, and States. Second, we discuss the role of Indian activism, the media, and interest organizations in Indian law and policy formulation. Third, we briefly examine the historical development of major federal Indian policy eras. Finally, we engage in a focused analysis of several specific federal policy initiatives that are particularly contentious at the moment--Indian gaming, religious freedom, federal recognition, and the international arena.

**Style:** 20% Lecture, 80% Discussion.

**Grading:** 25% mid exam, 25% final exam, 25% reports/papers, 25% other evaluation. weekly questions

**Exam Format:** Essay
AmIn 5303 American Indians and Photography
3 credit(s); Credit will not be granted if credit has been received for: AMIN 3303; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Albers, Patricia
Description: This course is an historical overview of photographic representations in which American Indian people have been the central subjects. 1) It entails a study of the subtle, complex, and ever-changing relationships between those who take, pose for, and view pictures of American Indians. 2) It considers how the social contexts and purposes of picture-taking influence the content, composition, and coding of images which make up the field of American Indian photographs. 3) It gives attention to the diverse and often contradictory ways in which photographs are understood in meaningful ways, and more specifically, it inquires into whether American Indian cultures engage processes of photographic representation through distinct aesthetic standards and practices. 4) In doing so, it takes a critical look at how the appearance and meaning of photographs are related not only to the cultural contexts in which they are produced, but also to the agencies of those who stand behind their making. Special attention is paid to some of the intended as well as unintended ideological and political consequences of photographic image-making in historical settings dominated by colonialism and its gaze.
Style: 40% Lecture, 40% Discussion. reading and studying photographs
Grading: 60% reports/papers, 40% special projects.

AmIn 5402 American Indians and the Cinema
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Meland, Carter
Description: In American Indians and the Cinema, we examine historical and contemporary representations of American Indian peoples in film, the power inequities reflected in those representations, and American Indian resistance to those representations. We will ask ourselves how have particular images of Indians in the movies served the interests of an American nationalist agenda rather than the interests of Native individuals and nations themselves. The course aims to make such questions of the power of representation clear to students and offers the tools to engage in a critique of conventional cultural representations of American Indian people, as well as, more critically, exposing them to an emerging body of work by American Indian filmmakers asserting their own authority in controlling their images and offering their stories to the viewing world at large. The course addresses ideas of diversity and social justice in the U.S. by exploring how films by American Indian filmmakers offer a differing idea of what American Indian experience has been and is--and ultimately examines the development of an American Indian "aesthetic" by Native filmmakers that is grounded in the historical and ongoing cultural viability of Native peoples. Students taking the course focus on developing a critical vocabulary for understanding both what film is and how it has historically represented American Indian peoples as well as exploring how these representations have changed, or not, in response to changing historical/social contexts. Through examinations and papers students will engage in the task of articulating their critical insights concerning the films and the contexts they emerge from and reflect on.
Style: 10% Lecture, 40% Film/Video, 40% Discussion, 10% Student Presentation.

AmIn 5409 American Indian Women: Ethnographic and Ethnohistorical Perspectives
3 credit(s); Credit will not be granted if credit has been received for: AMIN 3409;
Instructor: Lawson, Angelica
Description:

American Sign Language 240 Learning & Environmental Sciences Building

ASL 1701 American Sign Language I
5 credit(s);
Instructor: STAFF
Description: A study of the fundamentals of American Sign Language: Introduction to learning and understanding American Sign Language, cultural values and rules of behavior of the deaf community in the United States. Includes receptive and expressive readiness activities, sign vocabulary, grammatical structure, receptive and expressive finger spelling, and deaf culture. *Please note: A nominal fee may be required to attend a Deaf cultural and/or American Sign Language related event.

ASL 1702 American Sign Language II
5 credit(s);
Instructor: STAFF
Description: Continuation of the study of the fundamentals of American Sign Language: Increased communication skill in American Sign Language, cultural values and behavioral rules of the deaf community in the U.S., receptive and expressive, sign vocabulary, grammatical structure, receptive and expressive finger spelling and aspects of deaf culture. (SP-ASL 1701 or instructor approval) Please note: A nominal fee may be required to attend a Deaf cultural and/or American Sign Language related event.
ASL 3703 American Sign Language III
5 credit(s);
Instructor: STAFF
Description: Expanded instruction of American Sign Language receptive and expressive activities, sign vocabulary, grammatical structure, receptive and expressive finger spelling, narrative skills, cultural behaviors, and aspects of deaf culture. Abstract and conversational approach. (SP-ASL 1702 or instructor approval) Please note: A nominal fee may be required to attend a Deaf cultural and/or American Sign Language related event.

ASL 3704 American Sign Language IV
5 credit(s);
Instructor: STAFF
Description: Increases the emphasis on more abstract and challenging conversational and narrative range. Includes receptive and expressive readiness activities, sign vocabulary, grammatical structure, receptive and expressive finger spelling, various aspects of deaf culture and cultural behavior rules. (SP-ASL 1703 or instructor approval) Please note: A nominal fee may be required to attend a Deaf cultural and/or American Sign Language related event.

ASL 3705 Cultural Perspectives of Deafness
3 credit(s);
Instructor: STAFF
Description: Introduction to the deaf community as a linguistic and cultural minority group. The role of deaf people in the larger society, political activism, laws, access to information, educational philosophies and methods, and communication systems.

American Studies 104 Scott Hall

AmSt 1401 Comparative Genders and Sexualities
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Esparza, Rene
Description: Student may contact the instructor or department for information.

AmSt 2011 The United States since September 11
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Ferguson, Roderick A
Description: We think that those two towers were the only things that collapsed on that morning in September. But a lot more fell than has been reckoned with. We think that those attacks left only empty spaces in the middle of New York City. But a lot was erected in the name of what was lost. This course analyzes the changes that took place within the United States and how those changes have a history in prior and forgotten wars in Asia, the Middle East, and Latin America. This course investigates how that day was remembered in the official terrains of government and in the unofficial venues of literary and visual art. This class asks how the lives of citizens and immigrants changed in the aftermath and tries to take stock of all that fell and all that was erected one day in 2001.
Style: 50% Lecture, 50% Discussion.
Grading: 35% mid exam, 35% final exam, 10% class participation.
Exam Format: essay, short answer

AmSt 2021 Bodies and Their Discontents
3 credit(s);
Instructor: Fajardo, Kale Bantigue
Description: This course examines the aesthetic and cultural ideal of the beautiful body as it has developed as a marker of citizenship in the United States, and how it has been shaped by ideas of race, gender, sexuality and class. Rather than treating the body as prior to politics, the class seeks to denaturalize the body by focusing on the ways that institutions, governments, social groups and individuals have produced normative assumptions about ‘the good,’ ‘the beautiful,’ and ‘the healthy?’ that were then used to regulate bodies. It also discusses how groups and individuals have attempted to rework these normative assumptions and produce alternative visions of beauty and the human form. To understand this relation, the class begins by 1) considering different historical and social constructions of the body. We outline how ideals of the beautiful body have changed over time and in relation to political, economic and cultural developments. We then consider 2) the different ways the body has been commercialized and how commercialization has shaped notions of beautiful and healthy bodies. We also look at 3) the different ways that bodies have been disciplined and the different institutions that have developed to discipline bodies. We focus particular attention on 4) reproduction and 5) style and fashion as important locations for the production of cultural norms about beauty and health. The class then turns to explore the different ways that these cultural norms of beauty are resisted and challenged. We consider the ways that 6) health and sickness and 7) various subcultures ? ranging from queer and transgendered communities to punk-rockers ? have subverted and offered alternatives to the norms regulating the body. Finally, we consider 8) the politics of the body, and ask how various groups have
AmSt 3001 Contemporary Perspectives on Asian America

3 credit(s); Credit will not be granted if credit has been received for: AAS 3001; Meets CLE req of Diversity and Soc Justice US

Instructor: Fajardo, Kale Bantigue

Description: Where are Asian Americans located locally, regionally, nationally, and globally? Does geographic location make a difference in how Asian Americans understand and experience their identities and communities? How do different places and the politics in these places (for example, Asia, U.S. west coast, U.S. Midwest, New York, Hawaii, Caribbean) affect Asian/Asian American experiences, identities and communities? This course focuses on different sites in Asian America to better understand the complexity, beauty, and problems of Asian America. Key questions for the course include: How do Asians/Asian Americans in diverse geographic locations experience, historicize, politicize, visualize, and/or imagine themselves and their communities in the context of the U.S., Asian America, and beyond? Who, what, where, when, and how is Asian America? What are the cultural politics of space, place, and movement in Asian America? How do these issues play out in Minnesota/Twin Cities? Participants in this course will seriously explore and engage these questions and themes by reading theory, literature, film, and art and working on a group research project about an Asian American space, place, or movement in the Twin Cities.

Style: 30% Lecture, 30% Film/Video, 40% Discussion.

Grading: 40% reports/papers, 40% class participation, 20% other evaluation. Final Project

AmSt 3003 Public History

A-F only, 3 credit(s); [AMST jr or sr], instr consent Credit will not be granted if credit has been received for: HIST 3001;

Instructor: O'Brien, Jean Maria

Description: The study of history is not confined solely within the classroom. Interpretations of a collective past are produced in a vast array of public venues including museum exhibitions, films, theme parks, and web sites. This course provides an introduction to the theory, methods, practice, and politics of history produced in nonacademic settings. Students will become familiar with a variety of public historical practices through guest lectures by leading professionals (including oral historians, museum curators, and documentary filmmakers) and will learn to think critically about the meanings and uses of historical knowledge in public contexts. Students will also have the opportunity to produce public history projects, which will be presented to the class (and possibly to other audiences) at the end of the semester. This course will encourage students to explore career opportunities in the field. It is a prerequisite for HIST 3990, a for-credit public history internship course to be offered in the spring 2006 semester (NOTE: Students who enroll in this course can not be guaranteed internship placement.) This course is limited to Juniors and Seniors. Please contact the instructor at kpmurphy@umn.edu with questions.

Style: 40% Lecture, 60% Discussion.

Grading: 40% reports/papers, 40% special projects, 20% class participation.

AmSt 3113W America's Diverse Cultures

3 credit(s); Meet CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive

Instructor: Beane, Katherine Elizabeth

Description: Student may contact the instructor or department for information.
AmSt 3114 America in International Perspective

3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: The nature of international cultural exchange. The impact of U.S. cultures and society on other countries of the world as well as the impact of other cultures and societies on the United States. Recent topics have included: America in Foreign Media, U.S. - Mexico Border Cultures. Class time, workload, grading and exam format are determined by instructors. The focus of each instructor varies with the instructor's expertise.
Style: To be determined by instructor
Grading: To be determined by instructor

AmSt 3117 Latinos in America's Global Cities

3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Castellanos,Bianet
Description: This course explores the relationship between Latina/o immigration and the development of New York City, Los Angeles, and Miami into global cities. This course begins with a theoretical foundation for understanding "global cities" and then moves to a consideration of the foundational role Latina/o immigrants play in the creation of such cities. This comparative framework will allow us to consider the similarities and differences among the socio-political trajectories of Latina/o communities: Mexicans in Los Angeles, Puerto Ricans and Dominicans in New York City, and Cubans in Miami. Given the diversity within Latino communities, this class will rely on an interdisciplinary approach to race, class, sexuality, and gender relations. We will discuss topics such as: the social production of power in relation to immigration and citizenship, labor conflicts and social justice movements, race and ethnicity as a social construct, and historical and spatial changes in street life and the built environment. Finally, this course will provide us with a better understanding of the cities we live in and the people who sustain them.
Style: 40% Lecture, 10% Film/Video, 30% Discussion, 20% Small Group Activities. This course includes an optional service-learning component averaging 2-3 hours per week for approximately 30 hours in total.
Grading: 40% quizzes, 10% attendance, 40% reflection paper, 10% class participation.

AmSt 3252W American Popular Culture and Politics: 1900 to 1940

4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Sarmiento,Tom
Description: This writing-intensive course explores some of the social and cultural shifts that emerged in the U.S. at the turn of the twentieth century following a series of wars (particularly the Mexican-American War, the Civil War, wars with Native Americans, the Spanish-American War, and the Philippine-American War) and in response to new technologies that developed out of the Industrial Revolution during the latter half of the nineteenth century. Focusing on a variety of popular cultural forms (including world's fairs, film, urban night life, fiction, radio, music, and fashion) nascent during the late nineteenth and early twentieth centuries, we will explore the ways in which culture and politics have informed one another across space and over time. We will specifically discuss how questions of race, class, gender, and sexuality—among other vectors of identity—shaped definitions of American national identity during this period and how various groups sought to contest such boundaries. Moreover, we will analyze the multiple meanings of the "popular" and its relation to "high" culture in order to lay bare the politics of inclusion and exclusion central to the U.S. national project. While recognizing the pleasures of popular culture, this course aims to highlight the power of popular culture as well as culture more broadly to transform the world in which we live.
Grading: 30% final exam, 40% reflection paper, 30% class participation.
Exam Format: Take-home

AmSt 3253W American Popular Culture and Politics: 1940 to the Present

4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: STAFF
Description: In this course, we will examine how the United States changed since World War II as a result of domestic and international struggles, exploring the role popular culture played in this transformation. During these years the nation became an international power, altering the ways in which Americans understood their place in the world. A new consumer culture and domestic ideal became linked to American identity and Cold War politics. Within the U.S., challenges to the mainstream took the form of a new counter culture, the assertion of black citizenship, and the rise of feminism, each demanding participation in public life and a redefinition of the hierarchies of the past. In this course, we will look at the ways in which these conflicts at home and abroad have changed the ways Americans think about themselves as citizens and the place of our nation in the world.
AmSt 3993 Directed Studies
1-9 credit(s), max credits 9, 1 completion allowed;
Instructor: STAFF
Description: Arrangements must be made with the professor who oversees the project.

AmSt 4301 Workers and Consumers in the Global Economy
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Dillon, Steve Patrick
Description: This course explores the history of work and consumption under contemporary globalization, focusing in particular on the United States. Students will consider the politics of work and consumption under war time, slavery, in the prison, in the post-war suburbs, on the U.S./Mexico-border, and a variety of other sites inside and beyond the formal United States. In particular, the class will examine how labor and consumption have been central to the regulation and production of race, gender, sexuality, and class. In addition, by drawing on film, TV, and advertising, we will focus on the politics of work and consumption, considering such contemporary issues as "ethical" consumption, sweatshops, immigration, deindustrialization, and the politics of protest.

AmSt 4961 Proseminar I
3 credit(s);
Instructor: May, Lary L
Description: Student may contact the instructor or department for information.

AmSt 8201 Historical Foundations of American Studies
3 credit(s);
Instructor: May, Lary L
Description: Student may contact the instructor or department for information.

AmSt 8231 Cultural Fallout: The Cold War and Its Legacy, Readings
3 credit(s);
Instructor: May, Elaine Tyler
Description: This course will examine the culture of the Cold War as it developed in the years after World War II, how it affected and reflected the domestic politics, public policies, and civic life in the postwar era, the impact of domestic anti-communism, and the influence of American cultural politics abroad. We will examine how the Cold War shaped gender expectations, sexuality, class relations, racial justice and civil rights, and how its legacy has affected American politics, culture, and social life in the years since. The course will be organized in the form of a professional working group, with scholarly debates, discussions, and conference-style presentations. The purpose of this format is to model professional activities that you will engage in as you embark on your academic careers. Graduate school should serve not simply as the culmination of your education as students, but as the beginning of your career as scholars. As such, you are expected to read, write, and participate in the seminar at a level consistent with standards of professional academic life.

AmSt 8801 Dissertation Seminar
S-N only, 3 credit(s);
Instructor: Prell, Riv-Ellen
Description: Student may contact the instructor or department for information.

AmSt 8920 Topics in American Studies
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ferguson, Roderick A
Description: Totality and Visuality in the Days after '68 What are the intersections between theories of totality and artistic innovations around perspective? What utility is there in bringing these very different formations together? Believing that questions like these were particularly germane for critical and artistic formations in the '68 movements in the US and Europe, the course looks at the intellectual overlap between critical theory and art. To that end, the course will investigate how artistic movements among feminists, queers, and people of color were--like critical theorists--trying to reimagine the components of social totality.

AmSt 8970 Independent Study in American Studies
1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Prell, Riv-Ellen
Description: Student may contact the instructor or department for information.

### Anatomy 6-125 Jackson Hall

**ANAT 3001 Human Anatomy**
3 credit(s); [BIOL 1002W or BIOL 1009 or BIOL 2002 or equiv], at least soph credit will not be granted if credit received for: Anat 3001/Anat 3301/Anat 3601/INMD 3001/INMD 3301
Credit will not be granted if credit has been received for: ANAT 3611
Instructor: Bauer, G Eric
Description: Student may contact the instructor or department for information.

**ANAT 4900 Directed Studies in Anatomy**
S-N only, 1-6 credit(s), max credits 18, 3 completions allowed;
Instructor: Weinhaus PhD, Anthony James
Description: Intended for students who have successfully completed ANAT 3001/3301 or ANAT 3601/3611 and have arranged to conduct an extensive research project with course director or have been selected as a Teaching Assistant. Requires course directors approval.
Style: 90% Laboratory, 10% Service Learning. At least 60 hours of laboratory required
Grading: S/N based upon hours completed in lab.

**ANAT 5095 Advanced Problems in Anatomy**
A-F only, 1-6 credit(s), max credits 12;
Instructor: Weinhaus PhD, Anthony James
Description: Student may contact the instructor or department for information.

**ANAT 5095 Advanced Problems in Anatomy**
A-F only, 1-6 credit(s), max credits 12;
Instructor: Cook, Mark S.
Description: Student may contact the instructor or department for information.

**ANAT 5150 Human Gross Anatomy**
A-F only, 5 credit(s);
Instructor: Weinhaus PhD, Anthony James
Description: Student may contact the instructor or department for information.

**ANAT 6050 Dental Gross Anatomy**
A-F only, 5 credit(s);
Instructor: Cook, Mark S.
Description: Student may contact the instructor or department for information.

### Anesthesiology B-515 Mayo

**Anes 8269 Research in Anesthesia**
1 credit(s);
Instructor: Palahniuk, Richard John
Description: Student may contact the instructor or department for information.

### Animal Science 305 Haecker Hall

**AnSc 1001 Orientation to Animal Science**
A-F only, 1 credit(s);
Instructor: Rozeboom, Gretchen Diane
Description: Animal Science Orientation is designed to promote positive academic and social relationships with faculty and other new students both in and out of the classroom. During the course of the semester, students will be introduced to a variety of services and opportunities found at the University of Minnesota. You will have opportunities to learn more about yourself and your motivations for working in the field of animal science and its related areas. Additionally, you will hear from professionals who are actively involved in various aspects of the animal science industry and the veterinary profession in order to find out more about career opportunities. This class is primarily designed for freshman students and transfers new to the University of Minnesota.
**Style:** 15% Lecture, 20% Discussion, 10% Small Group Activities, 5% Field Trips, 50% Guest Speakers. A required, off campus field trip will likely be held on a Saturday in September.

**Grading:** Class is only offered as letter graded.

**Exam Format:** Quizzes are short answer, True or False or Multiple Choice

### AnSc 1007 Horse in Your Backyard

A-F only, 2 credit(s); Credit will not be granted if credit has been received for: AGRO 1007;
Instructor: Hathaway, Marcia R

**Description:** Role of horses in society. How to keep a horse well fed and healthy. Nutrition, feedstuffs, pasture, health. How to seek/interpret information on vaccination, worming, nutrition, grazing management, hay selection, manure handling, and use of dietary feed additives/enhancers.

### AnSc 1011 Animals and Society

3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Seykora, Anthony James

**Description:** This course addresses contemporary issues that are impacting animal agriculture. Major issues include the safety, nutritional value and health related issues of animal products in the human diet; animal behavior, welfare, and rights; organic vs. conventionally produced food; genetically enhanced foods; and the changing, industrialized structure of the livestock industry. The main focus is on livestock species, but care, management, and welfare of companion animals and wildlife are also a part of the course. Guest speakers from the livestock/food industries and animal welfare groups are an integral part of the course.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 40% mid exam, 20% final exam, 40% reports/papers.

**Exam Format:** Short answer/true and false/multiple choice

### AnSc 1511 Food Animal Products for Consumers

3 credit(s);
Instructor: Rozeboom, Kyle James

**Description:** Introduction to the compositional variation, processing, selection, storage, cookery, palatability, nutritional value, and safety of red meat, poultry, fish, and dairy products.

### AnSc 1701 Historical Influence of the Horse on Society

3 credit(s); Meets CLE req of Historical Perspectives
Instructor: Hathaway, Marcia R

**Description:** Student may contact the instructor or department for information.

### AnSc 2011 Dairy Cattle Judging

2 credit(s);
Instructor: Hansen, Leslie Bennett

**Description:** Evaluation of dairy cows and heifers on the basis of physical appearance. Training in oral justifications of placings of classes of animals. Field trips to many dairy farms in Minnesota, Iowa, and Wisconsin to evaluate dairy animals. Most students enrolling in this course have interest in participating in the Intercollegiate Dairy Cattle Judging Teams program. No previous dairy cattle judging experience is required, but is highly recommended.

**Style:** 100% Laboratory. Placings of classes and oral justification of placings.

**Grading:** 100% other evaluation. Placings of classes and oral justification of placings.

**Exam Format:** None

### AnSc 2055 Horse Management

2 credit(s);
Instructor: Martinson, Krishona Lynn

**Description:** This course is designed to develop theoretical knowledge and practical skills related to horse management and health through a combination of lecture, class discussion, group projects and presentations. Best management practices are discussed and include breeds and uses, behavior, vaccinations, deworming, lameness, poisonous plants, forage management, liability, and facility management. Current topics affecting the horse industry and equine career options are also discussed.

### AnSc 2056 Horse Management Practicum

2 credit(s);
Instructor: Martinson, Krishona Lynn

**Description:** This course is designed to develop practical skills related to horse management through hands-on exercises, diverse topics and presenters, exposure to research methodology, community service, and group presentations. Students (in small groups) will
be assigned to care for one horse throughout the semester. Daily chores (including weekends and holidays) will include grooming, hoof picking, feeding, cleaning of waterers, manure removal, barn sweeping, lunging and/or hand walking. The time commitment to complete these tasks will take place outside of the scheduled course time and will require an additional three hours each week. Students will also be expected to complete a work/volunteer day at a local non-profit and will be responsible for conducting an applied research project during the semester. Students will prepare two group presentations, one on careers in the equine industry and the other on the results of the research project. The course will closely follow ANSC 2055: Horse Management, but is offered as an independent course for students currently enrolled in, or who have previously completed, ANSC 2055 Horse Management.

**AnSc 2401 Animal Nutrition**
- **3 credit(s);**
- **Instructor:** Stern, Marshall D
- **Description:** Introduction to the principles of animal nutrition discussed on a comparative species basis including classification and function of the various nutrients (carbohydrates, protein, lipids, minerals and vitamins); use of nutrients for body maintenance, growth, egg production, gestation, and lactation; comparative study of the digestive systems of farm animal species; nutrient requirements and allowances for farm animals. The course is targeted for undergraduates seeking an understanding of how feedstuffs are combined to meet the nutrient needs of animals and appreciate the practical application of nutrition to farm animals species.
- **Style:** 100% Lecture.
- **Grading:** 100% other evaluation. 5 EXAMS, WITH EACH EXAM WORTH 20% OF THE GRADE.

**AnSc 3011 Statistics for Animal Science**
- **4 credit(s); Credit will not be granted if credit has been received for: STAT 3011;**
- **Instructor:** Raeth-Knight, Mary Louise
- **Description:** The purpose of this course is to introduce students to statistics and statistical techniques and to develop students' statistical reasoning and critical thinking skills. Topics include descriptive statistics, probability, sampling and sampling distributions, hypothesis testing, experimental design, linear correlation, linear regression and multiple linear regression. Students will learn how to make sound arguments and decisions based on statistics when reviewing news articles or scientific publications with statistical content. In addition, in lab sessions, students will learn how to explore and draw conclusions from data using a basic statistical software package.

**AnSc 3142 Advanced Livestock Judging**
- **2 credit(s);**
- **Instructor:** Rozeboom, Kyle James
- **Description:** Student may contact the instructor or department for information.

**AnSc 3221 Animal Breeding**
- **4 credit(s);**
- **Instructor:** Seykora, Anthony James
- **Description:** This course is the application of qualitative and quantitative genetic principals to animal breeding. Topics include Mendelian genetics, computation of genetic values from an individual's own performance and relatives, selection indexes, inbreeding and relationships, crossbreeding and development of a breeding program. The laboratory portion of the course is held in the computer lab. Computer simulation programs enhance the learning experience of the students.
- **Style:** 60% Lecture, 15% Discussion, 25% Laboratory.
- **Grading:** 30% mid exam, 15% final exam, 15% special projects, 15% quizzes, 25% problem solving.
- **Exam Format:** true-false, multiple choice, problem solving

**AnSc 3301 Human and Animal Physiology**
- **3 credit(s);**
- **Instructor:** Wheaton, Jonathan E
- **Description:** This is an immediate level course intended for upper division undergraduate students. The course covers functions of major organ systems: the nervous system, muscles, cardiovascular, respiration, renal, metabolism and endocrinology.
- **Style:** 100% Lecture.
- **Grading:** 89% mid exam, 11% quizzes.
- **Exam Format:** One essay-type exam, others are multiple choice

**AnSc 3302 Human and Animal Physiology Laboratory**
- **1 credit(s);**
- **Instructor:** Wheaton, Jonathan E
- **Description:** This is a companion course to Human and Animal Physiology, AnSc 3301 (or an equivalent upper division course in systemic physiology). Students conduct computer-assisted and non-assisted laboratory experiments. Students usually work in teams.
Each student prepares lab reports and answers discussion questions. These are due and reviewed the following week. At the end of the semester a team final written report and oral presentation is required that addresses a student-selected topic in physiology. Experiments cover the nervous system, muscles, cardiovascular, blood, respiration and metabolism.

**Style:** 46% Discussion, 54% Laboratory.

**Grading:** 50% reports/papers, 40% written homework, 10% in-class presentation.

**AnSc 3305 Reproductive Biology in Health and Disease**
- **4 credit(s);**
- **Instructor:** Mauro PhD,Laura J.
- **Description:** This course is intended to provide students with an understanding of the basic principles of reproductive physiology emphasizing mammalian species. An introduction to the "chemical messengers" of reproduction--their synthesis, mechanism of action and regulation--will provide a foundation for a detailed study of topics, such as sexual differentiation, the functioning of the female and male reproductive systems, the physiology of pregnancy and birth, and reproductive senescence. These topics will be expanded to incorporate unique aspects of reproduction in domestic and wild animals and humans, along with relevant examples of the pathophysiology of reproductive diseases. The students will also be introduced to the current science and issues of applied reproductive biotechnologies. This course is targeted for undergraduate majors, pre-professionals and non-majors who want a better understanding of the basic and applied concepts of reproduction in animals and humans.

**Style:** 75% Lecture, 10% Discussion, 15% Laboratory.

**Exam Format:** Combination of short answer and multiple choice

**AnSc 3307 Artificial Insemination Techniques**
- **S-N only, 1 credit(s);**
- **Instructor:** Seykora,Anthony James
- **Description:** Hands-on training and techniques of artificial insemination in cattle at an off-campus laboratory setting. Proper techniques of AI and semen handling, and criteria for selection of bulls.

**AnSc 3403 Companion Animal Hot Button Issues**
- **3 credit(s);**
- **Instructor:** Stern,Marshall D
- **Description:** There are various circumstances where people differ in their opinions of how companion animals should be treated, type of care they should receive, and what type of animal can or should be kept as companions. There are many hot button issues that are debated among people, in the media, in the courts at both the federal level and in local communities. Students taking this course will become aware and familiar with various issues that affect Companion Animals in our society. Students will debate the pros and cons of each issue and formalize their own opinions based on information presented by debate teams.

**Style:** 25% Discussion, 50% Small Group Activities, 25% Student Presentation.

**Grading:** % of overall grade: Oral presentation and contribution in debate - 25%; Written statement on stance taken in the debate-25%; Weekly one page responses to debates and participation- 50%

**AnSc 3609 Business Planning for Animal Enterprises**
- **2 credit(s);**
- **Instructor:** Reneau,Jeffrey Kimball
- **Description:** The purpose of the class is to introduce the non-specie components of animal production systems (Information management, operation and personnel management, finances and marketing, nutrient cycling and manure management). In addition, the economic and global forces acting on the animal industries today, including animal well being, will be discussed. AgPlan, a web based farm business planning software, will be used as a template for the course.

**Grading:** 65% special projects, 25% attendance, 10% other evaluation.

**AnSc 4009W Undergraduate Senior Thesis: Science in Agriculture**
- **A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;**
- **Meets CLE req of Writing Intensive**
- **Instructor:** STAFF
- **Description:** Student may contact the instructor or department for information.

**AnSc 4092 Special Problems in Animal Science**
- **1-4 credit(s), max credits 4, 1 completion allowed;**
- **Instructor:** Seykora,Anthony James
- **Description:** Independent study in an area of animal science, under supervision of faculty member.

**AnSc 4092 Special Problems in Animal Science**
- **1-4 credit(s), max credits 4, 1 completion allowed;**
Instructor: Cox, Ryan Bradley
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Hansen, Leslie Bennett
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Seykora, Anthony James
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Noll PhD, Sally
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: White, Michael Ernest
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Shurson, Gerald C
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Mauro PhD, Laura J.
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Hathaway, Marcia R
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Rozeboom, Kyle James
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Ward, Christie
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Raeth-Knight, Mary Louise
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Stern, Marshall D
Description: Student may contact the instructor or department for information.
AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: O'Grady PhD, Scott M
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Dayton, William R
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Wheaton, Jonathan E
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Rozeboom, Gretchen Diane
Description: Student may contact the instructor or department for information.

AnSc 4099 Special Workshop in Animal Science
1-4 credit(s), max credits 24, 6 completions allowed;
Instructor: Seykora, Anthony James
Description: Workshops on a variety of topics in animal science.

AnSc 4099 Special Workshop in Animal Science
1-4 credit(s), max credits 24, 6 completions allowed;
Instructor: Noll PhD, Sally
Description: This is a special course offering for anyone interested in poultry production from raising chickens in your backyard to modern commercial production. The class will provide a "hands on" approach to poultry production with students learning the life cycle of chickens from hatching to processing meat type chickens. All different types of production systems (backyard, organic, small scale commercial, and large scale commercial) will be studied. Basics of poultry production including hatching, nutrition, disease control, housing, and management will be discussed.

AnSc 4099 Special Workshop in Animal Science
1-4 credit(s), max credits 24, 6 completions allowed;
Instructor: DiCostanzo, Alfredo
Description: Student may contact the instructor or department for information.

AnSc 4401 Swine Nutrition
3 credit(s);
Instructor: Shurson, Gerald C
Description: This course involves lectures, discussions and problem solving focused on key nutrition and feeding program management concepts related to developing and evaluating life cycle feeding programs for swine. Diet formulation and evaluation along with estimating nutrient requirements in each stage of production using computer software are key activities of the course. Both undergraduate and graduate students, with some previous coursework in nutrition, who want a comprehensive understanding of all the major considerations of providing optimum cost effective nutrition to swine in all phases of production, are encouraged to take this course.
Style: 50% Lecture, 25% Discussion, 25% Laboratory.
Grading: 5% reports/papers, 30% problem solving, 65% other evaluation. exams
Exam Format: essay, multiple choice, matching, short answer, true/false, problem solving

AnSc 4404 Applied Dairy Nutrition
2 credit(s);
Instructor: Raeth-Knight, Mary Louise
Description: Student may contact the instructor or department for information.

AnSc 4603 Beef Production Systems Management
AnSc 4613 Advanced Beef Production Systems Management
4 credit(s);
Instructor: DiCostanzo, Alfredo
Description: Student may contact the instructor or department for information.

AnSc 5200 Statistical Genetics and Genomics
4 credit(s);
Instructor: Da, Yang
Description: This course is the first course of a 2-course series on gene discovery and genomic selection using genome-wide SNP markers. The focus of this course is data analysis for gene discovery based on the relationships between phenotypes and DNA markers. This course has six components: 1) preparation in statistics, genomics concepts and population genetics; 2) parametric linkage analysis; 3) nonparametric linkage analysis including linkage disequilibrium analysis; 4) analysis for mapping quantitative trait loci (QTL); 5) analysis of genome-wide association studies; and 6) parentage testing and concepts of genomic prediction and selection.

AnSc 5625 Nutritional Biochemistry
3 credit(s);
Instructor: Chen, Chi
Description: Please see NUTR 5625.

AnSc 5700 Cell Physiology
A-F only, 4 credit(s);
Instructor: Palmer PhD, Melissa L
Description: Student may contact the instructor or department for information.

AnSc 8134 Ethical Conduct of Animal Research
A-F only, 3 credit(s); Grad student or prof school student or instr consent Credit will not be granted if credit has been received for: CMB 8134;
Instructor: Crooker, Brian A
Description: The major objectives for this course are designed to meet federal requirements for training in ethical scientific conduct, particularly as it pertains to use of animal subjects. This course provides 1) a framework for understanding the ethical pros and cons for the use of nonhuman animals in research; 2) information about resources and regulations regarding the care and use of nonhuman animals; 3) theoretical bases and practical experiences with regard to the purpose and function of regulatory and oversight bodies; and 4) awareness of issues related to biomedical, clinical, and agricultural research.

AnSc 8194 Research in Animal Genetics
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Hansen, Leslie Bennett
Description: Student may contact the instructor or department for information.

AnSc 8311 Animal Bioenergetics
A-F only, 3 credit(s);
Instructor: DiCostanzo, Alfredo
Description: Integrated systems approach to energy metabolism of animals. Application of classical techniques of calorimetry and comparative slaughter, development of systems for expressing energy content of feeds, and techniques for measuring whole body and organ metabolism of specific nutrients.

AnSc 8330 Concepts and Developments in Animal Nutrition
A-F only, 1-2 credit(s), max credits 8, 4 completions allowed;
Instructor: Stern, Marshall D
Description: Student may contact the instructor or department for information.

AnSc 8510 Graduate Seminar
1 credit(s), max credits 12, 12 completions allowed;
Anthropology 395 HHHCtr

Anth 1001 Human Evolution
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Dayton, William R
Description: Student may contact the instructor or department for information.

Anth 1001 Human Evolution
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Bangs, Eric William
Description: Humans are unique in the animal world. In this class, we will take a journey through time to examine the evolution of humans, and how natural selection also shapes our own anatomy and behavior. Our goal is to reconstruct the evolutionary history of our lineage, and the anatomy and behavior of our ancestors. The first half of the course is based firmly in the present, and will give you a strong background in evolutionary theory: Natural Selection, basic genetics, principles of behavioral biology and the comparative anatomy of living organisms (primarily monkeys and apes). In the second half of the course we will reconstruct the ecology, diet, anatomy, locomotion, and even the social behavior of the hominids (human ancestors) using the evolutionary principles learned in the first half of the course. Among the "big questions in human evolution" that we will address are: What were the earliest hominins, the australopiths, like? How did climate change affect macro- and micro-evolutionary patterns? How does tool use and culture feed back upon our bodies? How far back in time does modern human behavior date, and what is the evidence for it? When and where did our species, Homo sapiens, in its modern form, originate? While learning the most up-to-date synthesis of paleoanthropology's answers to these questions, students in this course will also learn first-hand how to apply the analytical methods used by paleoanthropologists.
Style: 50% Lecture, 50% Laboratory.
Grading: 35% mid exam, 20% final exam, 35% laboratory evaluation, 10% other evaluation. in-class active-learning assignments
Exam Format: multiple choice

Anth 1001 Human Evolution
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Tappen, Martha
Description: Humans are unique in the animal world. In this class, we will take a journey through time to examine the evolution of humans, and how natural selection - the same process that gives the butterfly its wings, the horse its speed, and the worm its wiggle - also shapes our own anatomy and behavior. Our goal is to reconstruct the evolutionary history of our lineage, and the anatomy and behavior of our ancestors. The first half of the course is based firmly in the present, and will give you a strong background in evolutionary theory: Natural Selection, basic genetics, principles of behavioral biology and the comparative anatomy of living organism (primarily monkeys and apes). In the second half of the course we will attempt to reconstruct the ecology, diet, anatomy, locomotion and even the social behavior of the hominids (human ancestors) using the evolutionary principles learned in the first half of the course. Among the "big questions in human evolution" that we will address are: What were the earliest hominids, the australopithcines, like? How did climate change affect macro- and micro-evolutionary patterns? How does tool use and culture feed back upon our bodies? How far back in time does modern human behavior date, and what is the evidence for it? When and where did our species, Homo sapiens, in its modern form, originate?
Style: 50% Lecture, 50% Laboratory.
Grading: 45% mid exam, 20% final exam, 5% reports/papers, 30% laboratory evaluation.
Exam Format: Multiple choice

Anth 1001 Human Evolution
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Wilson, Michael Lawrence
Description: Humans are unique in the animal world. In this class, we will take a journey through time to examine the evolution of humans, and how natural selection - the same process that gives the butterfly its wings, the horse its speed, and the worm its wiggle - also shapes our own anatomy and behavior. Our goal is to reconstruct the evolutionary history of our lineage, and the anatomy and behavior of our ancestors. The first half of the course is based firmly in the present, and will give you a strong background in evolutionary theory: Natural Selection, basic genetics, principles of behavioral biology and the comparative anatomy of living organism (primarily monkeys and apes). In the second half of the course we will attempt to reconstruct the ecology, diet, anatomy, locomotion and even the social behavior of the hominids (human ancestors) using the evolutionary principles learned in the first half of the course. Among the "big questions in human evolution" that we will address are: What were the earliest hominids, the australopithcines, like? How did climate change affect macro- and micro-evolutionary patterns? How does tool use and culture feed back upon our bodies? How far back in time does modern human behavior date, and what is the evidence for it? When and where did our species, Homo sapiens, in its modern form, originate?
Style: 50% Lecture, 50% Laboratory.
Grading: 45% mid exam, 20% final exam, 5% reports/papers, 30% laboratory evaluation.
Exam Format: Multiple choice
Anth 1003V Understanding Cultures: Honors
A-F only, 4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 1003W Understanding Cultures
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Introduction to social and cultural anthropology for undergraduate majors and non-majors. Comparative study of societies and cultures around the world. Topics include adaptive strategies; economic processes; kinship, marriage and gender, social stratification; politics and conflict; religion and ritual; personality and culture. We will survey a variety of human cultures and explore theories about the evolution, function and meaning of culture.
Style: 75% Lecture, 25% Discussion.
Exam Format: multiple choice; essay

Anth 1904 Freshman Seminar: Exploring Humanitarianism and Global Health
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 1905 Freshman Seminar: Economic Justice and the US Economy
A-F only, 3 credit(s);
Instructor: Ho, Karen
Description: Student may contact the instructor or department for information.

Anth 3001 Introduction to Archaeology
4 credit(s); Meets CLE req of Social Sciences
Instructor: Flowers, Heather M
Description: Student may contact the instructor or department for information.

Anth 3003 Cultural Anthropology
3 credit(s); Credit will not be granted if credit has been received for: GLOS 3003;
Instructor: Lipset, David M
Description: This course closely examines different theoretical approaches to the study of different cultures. Major conceptual frameworks in modern cultural anthropology will be selected, such as social structural, Marxist, Freudian, and globalization. Ethnographic monographs will form the basis of the readings. Works such as Benedict's "Chrysanthemum and the Sword" and Taussig's "The Devil and Commodity Fetishism" will be read both for ethnographic and theoretical goals and contents. The course is meant for premajors, majors and other interested students. It will be taught using lecture format and small group activities
Style: 60% Lecture, 40% Discussion.
Grading: 80% mid exam, 20% final exam.
Exam Format: essay

Anth 3004 Great Controversies in Anthropology
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Gudeman, Stephen Frederick
Description: Anthropology has been home to famous controversies about human behavior, reason and behavior. We will explore six heated controversies that revolve about topics such as "facts," gender, "truth," poverty and deception. For example, should the famous Margaret Mead have believed Samoan girls when they talked about their sexual lives, can we make moral judgments about other cultures, and what happens when an anthropologist finds a people repulsive? Whose "voices" should be heard when determining the facts? After examining a controversy, we will divide into two sides, debate the issues and then try to reach a judicious perspective. Student participation will play a central role in our explorations into the seamy edges of anthropology, ourselves and other cultures.
Style: 40% Lecture, 50% Discussion. Films
Grading: 55% mid exam, 35% reports/papers, 10% class participation.
Exam Format: Essay

Anth 3015W Biology, Evolution, and cultural Development of Language
3 credit(s); Credit will not be granted if credit has been received for: ANTH 5015W; Meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Edminster, Avigdor A N
Description: Student may contact the instructor or department for information.

Anth 3023 Culture and Society of India
3 credit(s); Credit will not be granted if credit has been received for: GLOS 3961; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 3027W Archaeology of Prehistoric Europe
3 credit(s); Credit will not be granted if credit has been received for: ANTH 5027W; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Wells, Peter S
Description: Survey of the archaeology of Europe, from the earliest evidence of human presence about one million years ago to the Roman conquest of about two thousand years ago. Major topics include the development of art in the Early Stone Age, adoption of agriculture and village life during the Neolithic, early metallurgy and long-distance trade during the Bronze Age, and formation of cities in the Iron Age.
Style: 95% Lecture, 5% Discussion.
Grading: 30% mid exam, 25% final exam, 40% reports/papers, 5% quizzes.

Anth 3043 Art, Aesthetics and Anthropology
3 credit(s);
Instructor: Wolbert, Barbara
Description: Course Description: In this course we will approach art and aesthetics from an anthropological perspective - as a form of social practice. We will devote our time to engage in close readings of texts, which have influenced the theoretical discourse on art worlds and cultural production. The readings will in particular explore the production of meaning and the role art plays in society. Focusing on the individual and collaborative work of artists in the Twin Cities we will investigate the role of curators, directors and producers, the significance of public and private sponsors and the part of the respective art audiences. We will study artist’s professional practices and careers as well as art scenes and art institutions. We will inquire about the conditions of local art productions. Each of you will, in fact, embark on an individually scheduled field study in the Twin Cities, which will center on an artist or a group of artists, an art institution, or an art scene. During the course of the semester we will discuss your research projects in class. At the end of the course the results of your research will be presented in two class conferences. The first part of our class will consist of a brief series of on-line and on-site explorations of Twin Cities’ artists, art institutions and art scenes. These explorations include field trips to on-campus art spaces and art events as well as to sites in the proximity of the West Bank campus. During the second part of the course, while each student conducts his and her field work, we will divide our class time in sharing research experience and discussing theoretical texts, which help us to conceptualize the results of our observations and interviews. We will theorize the cultural context of art production. We will touch upon the relation of art and politics. The impact of corporate and state sponsorship on art production, participatory forms of art and other critical art practices, and the role of the artist defined in national, regional, ethnic and religious terms as well as in terms of class and gender will be discussed. We’ll be paying particular attention to the manner in which cosmopolitan fields of artistic production both reflect and reproduce structures of modernity on the one hand, and provide individual agents with resources to negotiate and/or contest them. In the third part of our course, you will share the findings of your research in a class conference.
Style: 20% Lecture, 5% Film/Video, 20% Discussion, 5% Small Group Activities, 10% Student Presentation, 20% Field Trips, 10% Guest Speakers.
Grading: 10% mid exam, 30% reports/papers, 5% quizzes, 20% reflection paper, 10% in-class presentation, 25% class participation. unexcused absences may effect grade

Anth 3401 The Human Fossil Record
A-F only, 3 credit(s); 1001 or instr consent Credit will not be granted if credit has been received for: ANTH 5401;
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 3402 Zooarchaeology Laboratory
A-F only, 3 credit(s);
Instructor: Tappen, Martha
Description: Mammal bones preserved at archaeological sites are an important source of evidence about past behaviors and environments. This class emphasizes basic laboratory techniques to identify and analyze mammalian bones to interpret the archaeological record. An important component is learning to identify skeletal elements (humerus, femur, tibia etc.), and taxon (e.g. horse, antelope, sheep, bison, hyena, etc.) when confronted with bones (and bone fragments). Skeletal adaptations and functional
anatomy is another focus of the class. Determining ages of death and mortality profiles through tooth eruption and wear patterns is covered. We also cover the practical skills of recognizing and analyzing different kinds of bone modifications—tool marks, tooth marks, burning, types of bone breakage, etc. The emphasis of the course is on interpreting faunal remains from Stone Age sites. Aspects of the history of human use of animals, including the evolution of hunting techniques, cooking, redistribution and sharing practices and how these are manifest in the zooarchaeological record are discussed. The emphasis will be on scientific methodologies, including microscopy, data collection and management, and measurement. You must be able to spend several hours a week in the laboratory working on your own each week.

**Style:** 25% Lecture, 50% Laboratory, 10% Student Presentation.

**Anth 3405 Human Skeletal Analysis**
A-F only, 3 credit(s); 1001 or instr consent Credit will not be granted if credit has been received for: ANTH 5405;  
**Instructor:** McNulty,Kieran P  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Soderberg,John A  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Wells,Peter S  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Raheja,Gloria Goodwin  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Gudeman,Stephen Frederick  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Tappen,Martha  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Lipset,David M  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Langford,Jean M  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Taussig,Karen-Sue  
**Description:** Student may contact the instructor or department for information.

**Anth 3913 Senior Project Planning**
1 credit(s);  
**Instructor:** Tostevin,Gilbert B  
**Description:** Student may contact the instructor or department for information.
Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Wilson, Michael Lawrence
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Monnier, Gilliane F
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Ho, Karen
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Valentine, David
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: McLean, Stuart J
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Song, Hoon
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Beeman, William O
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: McNulty, Kieran P
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: Hayes, Katherine F H
  Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
  1 credit(s);
  Instructor: McKay, Ramah
  Description: Student may contact the instructor or department for information.

Anth 3980 Topics in Anthropology
  3 credit(s), max credits 6;
  Instructor: Albers, Patricia
  Description: This course intends to provide students with a broad understanding of American Indian women across different tribal nations and over time. Although the particular expression of and expectations for their life accomplishments varies from one tribal nation to another, women contributed in important ways to provisioning, protecting, and promoting the spiritual, cultural and material well-being of their people. The course is divided into four sections, each representing a distinct focus in the study of American Indian
women. The first section is concerned with representation and interpretation, or how American Indian women have been perceived in
myth, literature, popular culture, and scholarly discourse. The second section studies the many ways women fed and housed their
families in the past, and how they continually adapted these roles to meet the changing conditions of the present. The third section
looks at the important role kinship plays in women’s lives, and it considers how work and kinship help to define a woman’s standing
in her community. In doing so, the course documents the manners in which women supported and changed the destinies of their
nations in diplomacy and war. And the final section covers women’s efforts to preserve the cultural integrity of their languages, artistic
traditions, and spiritual beliefs.

Anth 3980 Topics in Anthropology
3 credit(s), max credits 6;
Instructor: Wolbert, Barbara
Description: Investigating in particular the significance of photographs in coping with migration, this course touches upon a central
feature of photography - its ability to make present the absent. Rather than as recipients of images produced by mass media we look at
immigrants as producers of images: Our point of departure is the socially extremely effective but often-underestimated individual image
production. We will focus on private photographs, on photos taken, owned and circulated by migrants. These photographs, which may
or may not depict immigrants, refugees or displaced persons open insights into immigrants’ lives on multiple levels. Beyond the study of
the narratives of those who are in the photo and of those, who took it and who hold on to it, the study of practices of collecting,
framing, and displaying of photographs allows us to better understand processes of identification and community building. By
comparing earlier photograph collections of migrant families to more recent snapshots - analogue and digital - as well as to migrants’
video, internet, and mobile photo practices, we will explore immigrants’ changing sense of place and their migratory concepts. We will
hence discuss legacies of first generations of immigrants and constructions of neighborhoods, real and virtual. In a second step we
juxtapose these visual practices with visual representations of migration in the press and other mass media, using them as a key to
public discourses on migration, shaping immigration policies and integration politics.
Style: 50% Lecture, 25% Discussion, 20% Student Presentation, 5% Field Trips.
Grading: 10% mid exam, 20% final exam, 40% reports/papers, 15% in-class presentation, 15% class participation.
Exam Format: Mid term: open questions/short answers expected; final exam: essay form (take-home-exam).

Anth 4013 Senior Project
3 credit(s);
Instructor: Soderberg, John A
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
Anth 4013 Senior Project
3 credit(s);
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Monnier, Gilliane F
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Ho, Karen
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Valentine, David
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Song, Hoon
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Beeman, William O
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 4013 Senior Project
3 credit(s);
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.
Anth 4013 Senior Project
3 credit(s);
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Soderberg, John A
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.
Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Monnier,Gilliane F
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Ho,Karen
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Valentine,David
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: McLean,Stuart J
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Song,Hoon
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Beeman,William O
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: McNulty,Kieran P
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: Hayes,Katherine F H
Description: Student may contact the instructor or department for information.

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: McKay,Ramah
Description: Student may contact the instructor or department for information.

Anth 4031W Anthropology and Social Justice
4 credit(s);Meets CLE req of Writing Intensive
Instructor: Valentine,David
Description: What are the possibilities and pitfalls of an anthropological perspective in public policy and social justice work? Anthropology has long been associated with an ethos of advocacy and activism, but anthropological analyses are not always welcomed by policy makers or, sometimes, by the very people anthropologists claim to want to help, raising a host of ethical, theoretical, and methodological issues. This seminar will look both at anthropologists' attempts to marry ethnography, advocacy, social justice, and ethical action, but also consider some of the darker moments of anthropology's history. The focus will be on diverse social justice movements and issues in the U.S. and globally in the context of U.S.-dominated globalization. We will consider how social differences are implicated in larger political, economic and social injustices, and how we as anthropologists might respond effectively and ethically to these injustices. Some of the topics we will explore include: labor, globalization, development and the legacies of colonialism; human rights; environmentalism and environmental disasters; problems of studying the powerful; housing and homelessness; and ethical debates within anthropology. We will use these topics to discuss a series of questions: what are the relations of social power that pertain in ethnographic encounters? What are anthropologists' ethical responsibilities when their views of what is "right" clashes with
those of their study participants? Who reads what an anthropologist writes, and who has rights over what is read? How does one write ethnography so that it is effective in public policy and social justice work? How is ethnographic data actually used or misused in public policy debates and social justice work? Is it possible to define "social justice" or "human rights" cross-culturally? How does an anthropologist use her/his data to aid her/his study participants -- and is that aid always welcome? As well as an emphasis on cultural, social, political, and economic differences, this class thus also requires students to think about (and directly engage in the practice of) ethics and citizenship. We will discuss both cases from anthropology and students' own experiences which demonstrate the fine line between holding firm ethical positions while also recognizing that very often ethics and the practice of engaged citizenship is contextual and needs to account for competing positions. This 4 credit course includes a service learning component in which students will be expected to do ethnographic research in a grassroots, community, or social justice setting, for 4-6 hours a week for ten weeks over the course of the semester. A key part of the course will be training students in ethnographic research methods, interview methods, and qualitative data analysis so that students will have a useable skill upon leaving the class. The data from this research will form the basis for students' final papers.

**Style:** 10% Lecture, 70% Discussion, 15% Small Group Activities, 5% Student Presentation.

**Grading:** 80% reports/papers, 20% class participation.

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**Anth 4047 Anthropology of American Culture**
3 credit(s); Meets CLE req of Social Sciences

**Instructor:** Valentine, David

**Description:**

**Anth 4053 Economy, Culture, and Critique**
3 credit(s); Credit will not be granted if credit has been received for: ANTH 8205; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences

**Instructor:** Gudeman, Stephen Frederick

**Description:** Recent, dramatic changes in local and global economies have profoundly affected the lives of millions and have demanded that we rethink our analytical approaches. Drawing on the concept of culture, this course offers a critical perspective on our economic practices and theories. We will analyze and compare economic practices from around the globe, take a fresh look at our own behavior, and reinterpret formal models of economy. Economies and their concepts will be seen as local models which are elaborated and changed by communities. Exploring these models provides a different and new way of understanding material activities and the theories we use to explain them. Using this approach, we will examine critical issues such as the effects that market expansion has on marginalized peoples, on environments, and on our identities in a globalizing world. Rather than emphasizing increased wealth and consumption, many local models provide other meanings of wellbeing and economic success. Students will draw on these ideas to analyze practices in their everyday life. Course readings consist of articles, but the overall view will be presented in class. Class sessions will consist of lectures, discussion of the readings, conversation and reports about everyday experience of economy, and some films. There will be one exam during the semester and one final as well as the brief assignments. The course qualifies for international perspectives.

**Style:** 50% Lecture, 40% Discussion. Film

**Grading:** 40% mid exam, 40% final exam, 20% reports/papers.

**Exam Format:** Essay

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**Anth 4101 Archival Analysis for Anthropologists**
3 credit(s);

**Instructor:** Hayes, Katherine F H

**Description:** Methods and source analysis for historical anthropological research. This seminar will consider archival material as situated evidence, through theoretical and case study readings and visits to local archival repositories; but the majority of the coursework is project based. As such it may be suitable for students with ongoing research projects.

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**Anth 4344 Europe and its Margins**
A-F only, 3 credit(s);

**Instructor:** McLean, Stuart J

**Description:** This course seeks to shed light upon the constitution of the mythical, yet world-historically significant entity called "Europe" by focusing, less on present-day political boundaries than on regions and landscapes—forests, mountains, marshes, islands—that have been thought of at various times as marking Europe's inner and outer cultural and geographical limits. In charting the shifting imaginaries of such marginal spaces, it aims to engage too with the production of cultural and historical knowledge and the formation (and occasionally the subversion) of identity-claims. Readings draw upon a variety of historical, literary and ethnographic sources, with a view to exploring the interplay between physical geography, imagination and cultural memory, along with the forms of literary and scholarly writing developed in and in relation to marginal lands. The course concludes by relating these themes to the reconfigured political geography of post-socialism and European integration.
Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Soderberg, John A
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Ho, Karen
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Valentine, David
Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Song, Hoon
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Beeman, William O
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Soderberg, John A
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.
Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Wilson, Michael Lawrence
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Instructor: Valentine, David
Description: Student may contact the instructor or department for information.

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1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Song, Hoon
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Beeman, William O
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hayes, Katherine F H
Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Soderberg, John A
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

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1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Langford, Jean M
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Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.
Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Ho,Karen
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Valentine,David
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Song, Hoon
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Beeman, William O
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 4993 Directed Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Soderberg, John A
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Gudeman, Stephen Frederick
Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Taussig, Karen Sue
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Ho, Karen
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Valentine, David
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Song, Hoon
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Beeman, William O
Description: Student may contact the instructor or department for information.
Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 4994W Directed Research
1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 5015W Biology, Evolution, and Cultural Development of Language
3 credit(s); Credit will not be granted if credit has been received for: ANTH 3015W; Meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Edminster, Avigdor A N
Description: Student may contact the instructor or department for information.

Anth 5027W Origins of European Civilization
3 credit(s); Credit will not be granted if credit has been received for: ANTH 3027W; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Wells, Peter S
Description: Survey of the archaeology of Europe, from the earliest evidence of human presence about one million years ago to the Roman conquest of about two thousand years ago. Major topics include the development of art in the Early Stone Age, adoption of agriculture and village life during the Neolithic, early metallurgy and long-distance trade during the Bronze Age, and formation of cities in the Iron Age.
Style: 95% Lecture, 5% Discussion.
Grading: 30% mid exam, 25% final exam, 40% reports/papers, 5% quizzes.

Anth 5269 Analysis of Stone Tool Technology
A-F only, 4 credit(s);
Instructor: Tostevin, Gilbert B
Description: An archaeologist once stated "Love is fickle but stone tools are forever." This course takes this principle to heart in order to teach serious undergraduates and beginning graduate students how archaeologists can learn what it means to be human through the study of our ancestors' stone tools. From a scientific point of view, as the vast majority of human existence has been spent using stone tools as the primary medium for the interaction between humans and the environment, understanding the causes of change in stone tool variation through time is fundamental to understanding the human past. The goals of this course include 1) a comprehensive survey of known stone tool making processes (known as flintknapping), 2) a critical examination of different traditions of studying stone tools among archaeologists around the world, and 3) practical experience with analyzing an entire stone tool collection from an experimental archaeological site in order to reconstruct the behaviors, from procurement of raw stone to the discard of the exhausted tools, which produced the site and its collection. This course also provides students with hands-on experience in the practice of making stone tools for analysis. This is a practical laboratory class: the successful completion of this course will allow you to perform the tasks required of archaeologists currently working in the Cultural Resource Management industry. Space is limited to 20 students.
Style: 25% Lecture, 45% Laboratory. & hands-on flintknapping; 5% films
Grading: 45% other evaluation. laboratory reports; 20% final paper; 25% four in-class quizzes; 10% discussion participation
Exam Format: multiple choice and short answer

Anth 5401 The Human Fossil Record
A-F only, 3 credit(s); 1001 or instr consent Credit will not be granted if credit has been received for: ANTH 3401;
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 5402 Zooarchaeology Laboratory
A-F only, 3 credit(s);
Instructor: Tappen, Martha
**Description:** Mammal bones preserved at archaeological sites are an important source of evidence about past behaviors and environments. This class emphasizes basic laboratory techniques to identify and analyze mammalian bones to interpret the archaeological record. An important component is learning to identify skeletal elements (humerus, femur, tibia etc.), and taxon (e.g. horse, antelope, sheep, bison, hyena, etc.) when confronted with bones (and bone fragments). Skeletal adaptations and functional anatomy is another focus of the class. Determining ages of death and mortality profiles through tooth eruption and wear patterns is covered. We also cover the practical skills of recognizing and analyzing different kinds of bone modifications - tool marks, tooth marks, burning, types of bone breakage, etc. The emphasis of the course is on interpreting faunal remains from Stone Age sites. Aspects of the history of human use of animals, including the evolution of hunting techniques, cooking, redistribution and sharing practices and how these are manifest in the zooarchaeological record are discussed. The emphasis will be on scientific methodologies, including microscopy, data collection and management, and measurement. You must be able to spend several hours a week in the laboratory working on your own each week.

**Style:** 25% Lecture, 50% Laboratory, 10% Student Presentation.

**Anth 5405 Human Skeletal Analysis**
- A-F only, 3 credit(s);
- 1001 or instr consent
- Credit will not be granted if credit has been received for: ANTH 3405;
- **Instructor:** McNulty, Kieran P
- **Description:** Student may contact the instructor or department for information.

**Anth 5442 Archaeology of the British Isles**
- A-F only, 3 credit(s);
- **Instructor:** Wells, Peter S
- **Description:** This course examines the archaeology of the British Isles, with an emphasis on Great Britain. The seminar covers the history of archaeology, as well as the material remains of societies that inhabited the British Isles from some 700,000 years ago to the present. Among the periods covered are the Neolithic, the Bronze Age, the Iron Age, the Roman Period, and the early Middle Ages. Different interpretations of the archaeological material are considered.
- **Style:** 100% Discussion.
- **Grading:** 35% special projects, 55% in-class presentation, 10% class participation.

**Anth 5980 Topics in Anthropology: Storytelling in Conversation**
- 3 credit(s), max credits 12;
- **Instructor:** Sheldon, Amy PS
- **Description:** Storytelling in Conversation Taught with Anth 5980. Prereq: Introduction to Linguistics, Introduction to Linguistic Anthropology, or equivalent. Description: We will study basic linguistic, pragmatic, and sociolinguistic/interactional features of stories that emerge in everyday spontaneous conversations. We will also study how body engagement coordinates with talk to co-create a story. We will discuss and apply current research on story construction in linguistics, sociolinguistics, anthropological linguistics to story data recorded by students or presented by the instructor. Readings will include work by Labov, Ochs, Schegloff, Jefferson, C. Goodwin, M Goodwin, Thompson, Bucholtz, Georgakopoulou, McNeill, and others. Digital video recordings will be made with equipment that is free of charge, available at SMART Commons (Walter Library). Tools such as VLC, Media Mill, Video Ant, Transana, will be used for data transcription, annotation, analysis, and presentation. Tech support will be provided. No prior tech experience is necessary. The course is taught in a workshop format, and will be enhanced by resources in a high-tech STSS classroom. Students will present data for preliminary analysis in class throughout the semester; discussion and revision will lead to creation of a multimodal end of term written report that integrates text and video. Graduate students can explore a topic of interest with instructor’s guidance and approval. Moodle enhanced. Electronic reserves and text. If you have questions, please contact Professor Amy Sheldon, asheldon@umn.edu
- **Style:** 20% Lecture, 25% Discussion, 30% Small Group Activities, 20% Student Presentation, 5% Demonstration.
- **Grading:** 50% reports/papers, 20% written homework, 10% attendance, 10% in-class presentation, 10% class participation. No exams.
- **Exam Format:** n.a.

**Anth 5980 Topics in Anthropology: The Culture of Opera**
- 3 credit(s), max credits 12;
- **Instructor:** Walsh, David Allan
- **Description:** Business Anthropology This is a seminar designed both for students of anthropology and students of business and management. During the course of the semester we will explore the ways in which anthropological understandings and research techniques; particularly 'ethnographic techniques' can be used to enhance the study and practice of business. Topics to be covered during the semester include ethnography in the marketplace, anthropology and advertising, design anthropology, anthropology and management techniques, anthropology and international business. The seminar will have a number of guest speakers and several field projects. Students will carry out a number of practical fieldwork projects during the semester which will help them develop their skills as ethnographic analysts and interviewers. Each student will complete a final project in which they will try to solve a practical business problem through field observation and analysis. Students will be asked to write six reflection papers of approximately 2-3 pages (3-5 pages for 8810 students) based on readings and external observations. The final exercise for the course will be a fieldwork project
Anth 5980 Topics in Anthropology: Making the Dead Matter

3 credit(s), max credits 12;
Instructor: McLean, Stuart J
Description: Social scientists have sometimes identified the advent of modernity with the "disenchantment of the world" (a phrase made famous by the German sociologist Max Weber). According to this view, the juxtaposition of magic and modernity may seem an unlikely pairing. Magic, after all, would seem to belong to the realm of the pre-modern, destined to be left behind as societies worldwide come to organize themselves in accordance with the imperatives of historical progress and instrumental reason. A brief glance at the world of the early twenty first century suggests, however, that it is far from disenchanted. Indeed, many recent anthropological studies have noted that beliefs and practices relating to magic, witchcraft, ghosts and the supernatural, once labeled as "traditional" and therefore moribund, continue to flourish in the present. Far from being the antithesis of modernity or a vestige of a pre-modern past, magic and its associated phenomena confront us as irredicibly contemporary presences, interwoven in complex ways with political events, socioeconomic transformations and new technologies. This course explores some of the questions raised both by the curious symbiosis of magic and modernity and by the all too evident fascination that it has come to exercise of many recent commentators. The approach taken thus differs that of many recent studies. Rather than pursuing sociological or historical "explanations" of magical belief and practice, the course engages magic as a vantage point from which to question and rethink some of the foundational assumptions and categories of the social sciences; including the category of "modernity" itself. We shall be concerned, for example, with exploring the ontological and metaphysical underpinnings of magical belief and practice and the ways in which these challenge us to reappraise received notions of agency, causality, context and historicity. By the end of the course, it is hoped, not that the students will "understand" magic as a contemporary phenomenon, but rather that their habituated understandings of the contemporary world will have been re-shaped by magic. Readings comprise classic and contemporary studies of magic, along with examples from literature and the visual arts. Requirements consist of regular attendance, in-class presentations, participation in class discussions and a research paper of 10-15 pages (3xxx-level) or 15-20 pages (5xxx-level) on a topic to be chosen in consultation with the instructor.

Anth 5980 Topics in Anthropology: The Culture of Opera

3 credit(s), max credits 12;
Instructor: Beeman, William O
Description: Business Anthropology This is a seminar designed both for students of anthropology and students of business and management. During the course of the semester we will explore the ways in which anthropological understandings and research techniques; particularly 'ethnographic techniques' can be used to enhance the study and practice of business. Topics to be covered during the semester include ethnography in the marketplace, anthropology and advertising, design anthropology, anthropology and management techniques, anthropology and international business. The seminar will have a number of guest speakers and several field projects. Students will carry out a number of practical fieldwork projects during the semester which will help them develop their skills as ethnographic analysts and interviewers. Each student will complete a final project in which they will try to solve a practical business problem through field observation and analysis. Students will be asked to write six reflection papers of approximately 2-3 pages (3-5 pages for 8810 students) based on readings and external observations. The final exercise for the course will be a fieldwork project using ethnographic techniques to address a problem in organization, marketing, design or business behavior. The results of the field projects will be presented in May, accompanied by a written report on the fieldwork and results.

Style: 40% Lecture, 10% Discussion, 30% Small Group Activities, 20% Guest Speakers.
Grading: 40% special projects, 10% attendance, 30% reflection paper, 10% in-class presentation, 10% class participation.

Anth 5980 Topics in Anthropology: Global Migration and Photography

3 credit(s), max credits 12;
Instructor: Wolbert, Barbara
Description: Investigating in particular the significance of photographs in coping with migration, this course touches upon a central feature of photography - its ability to make present the absent. Rather than as recipients of images produced by mass media we look at immigrants as producers of images: Our point of departure is the socially extremely effective but often-underestimated individual image production. We will focus on private photographs, on photos taken, owned and circulated by migrants. These photographs, which may or may not depict immigrants, refugees or displaced persons open insights into immigrants' lives on multiple levels. Beyond the study of the narratives of those who are in the photo and of those, who took it and who hold on to it, the study of practices of collecting, framing, and displaying of photographs allows us to better understand processes of identification and community building. By comparing earlier photograph collections of migrant families to more recent snapshots - analogue and digital - as well as to migrants' video, internet, and mobile phone practices, we will explore immigrants' changing sense of place and their migratory concepts. We will hence discuss legacies of first generations of immigrants and constructions of neighborhoods, real and virtual. In a second step we juxtapose these visual practices with visual representations of migration in the press and other mass media, using them as a key to
public discourses on migration, shaping immigration policies and integration politics.

**Style:** 50% Lecture, 25% Discussion, 20% Student Presentation, 5% Field Trips.

**Grading:** 10% mid exam, 20% final exam, 40% reports/papers, 15% in-class presentation, 15% class participation.

**Exam Format:** Mid term: open questions/short answers expected; final exam: essay form (take-home-exam).

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**Anth 8004 Foundations of Anthropological Archaeology**

3 credit(s);  
**Instructor:** Hayes, Katherine F H  
**Description:** This seminar will introduce archaeological theory, in a historical perspective on the major developments and debates in the field. We will review the approaches that have been labeled culture-historical, processual, and post-processual; the methodological and interpretive implications of these approaches; and the intellectual issues shaping current archaeological discourse. In addition, we will explore the relationship of archaeological practice to the construction and reproduction of heritage. Throughout this seminar, the implications of these theoretical approaches to research design will be discussed.

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**Anth 8510 Topics in Archaeology**

3 credit(s), max credits 9, 3 completions allowed;  
**Instructor:** Wells, Peter S  
**Description:** This course examines the archaeology of the British Isles, with an emphasis on Great Britain. The seminar covers the history of archaeology, as well as the material remains of societies that inhabited the British Isles from some 700,000 years ago to the present. Among the periods covered are the Neolithic, the Bronze Age, the Iron Age, the Roman Period, and the early Middle Ages. Different interpretations of the archaeological material are considered.  
**Style:** 100% Discussion.  
**Grading:** 35% special projects, 55% in-class presentation, 10% class participation.

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**Anth 8510 Topics in Archaeology**

3 credit(s), max credits 9, 3 completions allowed;  
**Instructor:** Hayes, Katherine F H  
**Description:** Methods and source analysis for historical anthropological research. This seminar will consider archival material as situated evidence, through theoretical and case study readings and visits to local archival repositories; but the majority of the coursework is project based. As such it may be suitable for students with ongoing research projects.

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**Anth 8810 Topics in Sociocultural Anthropology**

3 credit(s), max credits 9, 3 completions allowed;  
**Instructor:** Walsh, David Allan  
**Description:** Student may contact the instructor or department for information.

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**Anth 8810 Topics in Sociocultural Anthropology**

3 credit(s), max credits 9, 3 completions allowed;  
**Instructor:** Ho, Karen  
**Description:** Capitalism seems to have triumphed so completely in the past four decades that the question of how to understand, resist, even undermine, "free markets" and capitalist enterprise is particularly crucial. In this graduate seminar, we will explore some of the diverse strategies that compose an anthropological approach to apprehending capitalism: one that centrally questions the dichotomy of society and culture vs. economy, and one that examines the cosmologies, practices, values, techniques, institutions, flows, and effects of capitalism. This course is equal parts theory, ethnography, and methodology; namely, how all three approaches and skills are crucial to the analyses of capitalism. We will interrogate key concepts in social scientific approaches to capitalism, from the state to neoliberalism, from finance to postindustrialism. We offer particular scholarly methodologies, case studies, and histories to study capitalism in such a way as to interrogate its contingent conditions of possibility, its embodied formations, and its disruptions and undoings. While a majority of the readings will focus on dominant capitalism in the United States (precisely because the histories, cultural practices, and ideologies of American capitalism have globalizing influence), we will also pay attention to world-making practices and ideologies from multiple global sites.

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**Anth 8810 Topics in Sociocultural Anthropology**

3 credit(s), max credits 9, 3 completions allowed;  
**Instructor:** McLean, Stuart J  
**Description:** Student may contact the instructor or department for information.

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**Anth 8991 Independent Study**

1-18 credit(s), max credits 18, 1 completion allowed;  
**Instructor:** Wells, Peter S
Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Raheja,Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Gudeman,Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Tappen,Martha
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Lipset,David M
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Langford,Jean M
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Taussig,Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Tostevin,Gilbert B
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Wilson,Michael Lawrence
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Ho,Karen
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Valentine,David
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: McLean,Stuart J
Description: Student may contact the instructor or department for information.
Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Song,Hoon
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Beeman,William O
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: McNulty,Kieran P
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Hayes,Katherine F H
Description: Student may contact the instructor or department for information.

Anth 8991 Independent Study
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: McKay,Ramah
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Soderberg,John A
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Wells,Peter S
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Raheja,Gloria Goodwin
Description: Student may contact the instructor or department for information.

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1-18 credit(s), max credits 18, 1 completion allowed;
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1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Song,Hoon
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Feinberg,Joshua M.
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Beeman,William O
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
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Instructor: McNulty,Kieran P
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Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Hayes,Katherine F H
Description: Student may contact the instructor or department for information.
Anth 8992 Directed Reading
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
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Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
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Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
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Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
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Instructor: Taussig, Karen Sue
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
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Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
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Instructor: Wilson, Michael Lawrence
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Anth 8993 Directed Study
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Instructor: Ho, Karen
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Instructor: Valentine, David
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Anth 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: McLean, Stuart J
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Anth 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: Song, Hoon
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Instructor: Beeman, William O
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Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Tappen, Martha
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.
Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Taussig, Karen-Sue
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Wilson, Michael Lawrence
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Instructor: Ho, Karen
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Anth 8994 Directed Research
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Instructor: Valentine, David
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Anth 8994 Directed Research
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Instructor: McLean, Stuart J
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Instructor: Song, Hoon
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Anth 8994 Directed Research
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Instructor: Beeman, William O
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Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 8994 Directed Research
1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: McKay, Ramah
**Apparel Design**  
240 McNeal Hall

**ADes 1221 Apparel Assembly Fundamentals**  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Introduction to the study of basic clothing structure through analysis of existing garments and application of basic sewing principles for creating new garments. The objectives of the course are: 1) To learn basic clothing assembly skills by studying existing garments and 2) To apply basic sewing fundamentals by creating several basic garments. This class is designed for pre-Clothing Design majors or those students interested in Clothing Design (instructor permission requested). The class is designed for studio learning opportunities with supporting lecture and demonstration. Project work requires an average of 10 hours outside of class.  
Style: 25% Lecture, 75% Laboratory.  
Grading: 50% final exam, 30% special projects, 20% quizzes.  
Exam Format: Multiple choice, true/false, fill in the blank.

**ADes 2196 Work Experience in Apparel Design**  
S-N only, 1-4 credit(s), max credits 8;  
Instructor: LaBat,Karen Louise  
Description: Student may contact the instructor or department for information.

**ADes 2196 Work Experience in Apparel Design**  
S-N only, 1-4 credit(s), max credits 8;  
Instructor: Bye,Elizabeth K  
Description: Student may contact the instructor or department for information.

**ADes 2196 Work Experience in Apparel Design**  
S-N only, 1-4 credit(s), max credits 8;  
Instructor: DeLong,Marilyn R  
Description: Student may contact the instructor or department for information.

**ADes 2196 Work Experience in Apparel Design**  
S-N only, 1-4 credit(s), max credits 8;  
Instructor: Dunne,Lucy Elizabeth  
Description: Student may contact the instructor or department for information.

**ADes 2211 Illustration for Apparel Design**  
A-F only, 3 credit(s);  
Instructor: Min,Seoha  
Description: Student may contact the instructor or department for information.

**ADes 2213 Textile Analysis**  
A-F only, 4 credit(s);  
Instructor: LaBat,Karen Louise  
Description: Student may contact the instructor or department for information.

**ADes 2222 Apparel Design Studio II**  
A-F only, 4 credit(s);  
Instructor: Goncu Berk,Gozde  
Description: Student may contact the instructor or department for information.

**ADes 3217 Fashion: Trends and Communication**  
A-F only, 3 credit(s);  
Instructor: Goncu Berk,Gozde  
Description: Student may contact the instructor or department for information.

**ADes 3227 Technical Design Studio**  
A-F only, 3 credit(s);
Instructor: Dunne, Lucy Elizabeth  
Description: Student may contact the instructor or department for information.

**ADes 4160H Honors Capstone Project**  
A-F only, 2 credit(s), max credits 4;  
Instructor: LaBat, Karen Louise  
Description: Student may contact the instructor or department for information.

**ADes 4160H Honors Capstone Project**  
A-F only, 2 credit(s), max credits 4;  
Instructor: Bye, Elizabeth K  
Description: Student may contact the instructor or department for information.

**ADes 4160H Honors Capstone Project**  
A-F only, 2 credit(s), max credits 4;  
Instructor: DeLong, Marilyn R  
Description: Student may contact the instructor or department for information.

**ADes 4193 Directed Study in Apparel Design**  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: LaBat, Karen Louise  
Description: Student may contact the instructor or department for information.

**ADes 4193 Directed Study in Apparel Design**  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Bye, Elizabeth K  
Description: Student may contact the instructor or department for information.

**ADes 4193 Directed Study in Apparel Design**  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: DeLong, Marilyn R  
Description: Student may contact the instructor or department for information.

**ADes 4193 Directed Study in Apparel Design**  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Dunne, Lucy Elizabeth  
Description: Student may contact the instructor or department for information.

**ADes 4196 Internship in Apparel Design**  
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted and approved in advance by adviser and internship supervisor, written consent of faculty supervisor, instructor consent credit will not be granted if credit already received for: DHA 4196;  
Instructor: STAFF  
Description:

**ADes 4218 Fashion, Design, and the Global Industry**  
A-F only, 3 credit(s), max credits 6;  
Instructor: DeLong, Marilyn R  
Description: Student may contact the instructor or department for information.

**ADes 4225 Apparel Design Studio V**  
A-F only, 3 credit(s);
Instructor: Bye, Elizabeth K  
Description: Senior level studio based course. Students use the design process to research and develop a marketable line of garments in preparation for public presentation  
Style: 15% Lecture. Studio  
Grading: 20% reports/papers, 80% special projects.

### Apparel Studies

#### ApSt 5123 Living in a Consumer Society  
A-F only, 3 credit(s);  
Instructor: Kim, Hye-Young  
Description: Student may contact the instructor or department for information.

#### ApSt 5193 Directed Study in Apparel Studies  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: STAFF  
Description: Directed study in design, housing and apparel. The topics, course content and readings are developed under the guidance of the supervising faculty member. Typically reserved for graduate students.  
Style: Working with supervising faculty  
Grading: 100% reports/papers. Or may be related to a project

#### ApSt 5218 Fashion, Design, and the Global Industry  
A-F only, 3 credit(s);  
Instructor: DeLong, Marilyn R  
Description: Student may contact the instructor or department for information.

#### ApSt 8192 Readings in Apparel Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: LaBat, Karen Louise  
Description: Student may contact the instructor or department for information.

#### ApSt 8192 Readings in Apparel Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: Bye, Elizabeth K  
Description: Student may contact the instructor or department for information.

#### ApSt 8192 Readings in Apparel Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: DeLong, Marilyn R  
Description: Student may contact the instructor or department for information.

#### ApSt 8192 Readings in Apparel Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: Wu, Juanjuan  
Description: Student may contact the instructor or department for information.

#### ApSt 8192 Readings in Apparel Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: Kim, Hye-Young  
Description: Student may contact the instructor or department for information.

#### ApSt 8192 Readings in Apparel Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: Dunne, Lucy Elizabeth  
Description: Student may contact the instructor or department for information.

#### ApSt 8193 Directed Study  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: LaBat, Karen Louise
Description: Student may contact the instructor or department for information.

ApSt 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Bye, Elizabeth K
Description: Student may contact the instructor or department for information.

ApSt 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Johnson PhD, Kim KP
Description: Student may contact the instructor or department for information.

ApSt 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: DeLong, Marilyn R
Description: Student may contact the instructor or department for information.

ApSt 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Wu, Juanjuan
Description: Student may contact the instructor or department for information.

ApSt 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Kim, Hye-Young
Description: Student may contact the instructor or department for information.

ApSt 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Dunne, Lucy Elizabeth
Description: Student may contact the instructor or department for information.

ApSt 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: LaBat, Karen Louise
Description: Student may contact the instructor or department for information.

ApSt 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Bye, Elizabeth K
Description: Student may contact the instructor or department for information.

ApSt 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: DeLong, Marilyn R
Description: Student may contact the instructor or department for information.

ApSt 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Wu, Juanjuan
Description: Student may contact the instructor or department for information.

ApSt 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: Student may contact the instructor or department for information.
ApSt 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Dunne, Lucy Elizabeth
Description: Student may contact the instructor or department for information.

Applied Business 20 Ruttan Hall

ABus 3051 Career Skills in the Professional Environment
2 credit(s);
Instructor: Bonderson, Lori
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, but will also participate as part of a small group. Visit "Class URL" for ODL policy, fee, and financial aid restrictions. Career planning and job search processes appropriate to business/professional careers. Exploring career options: career centers, company research and networking. Resume and cover letter writing. Job interview preparation. Organizational culture, transition from college to work, and job satisfaction.
Style: Online
Grading: 85% special projects. -Networking Interview (25%) -Cover Letter (10%) -Resume (10%) -Networking Assignment (10%) -Career Center Visit (10%) -Company Research (10%) -Interview Preparation (10%)
Exam Format: no exams

ABus 3065 Computer Security for the Business Professional
3 credit(s);
Instructor: Estrem, LeAllan James
Description: Essential information for all computer users... with no bit/byte savvy required! Track down and repel malicious intruders! Real-world examples and exercises will set you quickly on the road to safe, secure, and ethical computer use. You will learn how to... 1. Configure your computer to be free of viruses and worms 2. Know if your computer is infected; eradicate malicious software 3. Choose antivirus software and firewalls 4. Set up a secure Web page 5. Identify fraudulent Web locations; purchase on the Web securely 6. Use social networking sites safely 7. Use computers and the Internet ethically 8. Configure a secure home wireless network 9. Respond to identity theft. Prerequisites: None. However, the student should have some computer and Internet experience. In addition, if a student encounters an unfamiliar topic in class, the expectation is that the student will be resourceful and put in the time outside of class as necessary to master the concepts. Computing Resources Needed: Software--Microsoft Windows operating system, minimum Windows XP, Vista or 7 preferred. Apple and Linux work stations acceptable. Hardware--Laptop and minimum 2 GB RAM, 3 GB RAM, DVD player preferred.

ABus 3301 Introduction to Quality Management
A-F only, 3 credit(s);
Instructor: Martens, Scott L
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policy, fee, and financial aid information. Principles and concepts of managing quality in the context of business applications. Emphasizes improvement of business processes with six sigma process improvement methodology. Includes strategy for implementing and leading process improvement, Baldrige Award, ISO 9000, process control, performance measurement systems and Six Sigma.
Style: 100% Web Based.
Grading: 20% mid exam, 20% final exam, 10% special projects, 10% class participation. -11 article questions (10%) -11 discussion questions (10%) -4 group assignments (10%) -self-introduction (0%) -interview (10%)

ABus 4012 Strategic Decision Making and Problem Solving
A-F only, 3 credit(s);
Instructor: McNamara, Daniel E
Description: Frameworks and processes for decision-making emphasize: analyzing root causes, effects of problems and solutions within large and small organizations. Focus on creativity and team building in the problem solving heuristic model. Hands-on assignments include case studies, and a final real-world project and online presentation.

ABus 4022 Management in Organizations
A-F only, 3 credit(s);
Instructor: Haarklau, Evon A
Description: This fully online section is offered through Online and Distance Learning, College of the Continuing Education. Visit "Class URL" for ODL policy, including fee and financial aid restrictions. This course brings together key elements from the practical (on the job), the theoretical (in the classroom), and the personal (assessment) to facilitate a better understanding of management as a
profession. By the conclusion of this course, you will have learned to: --compare and contrast theoretical and practical thinking on professional management, and apply this knowledge to current practice; --describe and apply the characteristics of a strong manager in a high-performance organization; --explain and illustrate how planning, organizing, leading, and controlling are accomplished in a specific industry or organization; and --assess your own aptitude, interest, and knowledge for entering the management profession.

Style: 100% Web Based.

Grading: 8 "question of the week" discussion postings and responses (4%) -2 applied management research papers with executive summaries (32%) -A personal assessment and reflection paper (16%) -3 online quizzes (48%)

ABus 4023W Communicating for Results
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Lowry, Ann E.

Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Aspects of communication essential for being persuasive and influential. Organizing and presenting ideas effectively, strategies for audience analysis, choosing communication methods, making appropriate use of informal influence methods, and handling dissent. Processes for intercultural communication.

Style: 100% Web Based.

Grading: 9 group discussion forums (10%)-Web 2.0 wiki project (20%) -9 all-class discussion forums (10%)-9 documents (47%)-4 Wimba Voice Boards (13%)

ABus 4041 Dynamics of Leadership
A-F only, 3 credit(s);
Instructor: Kaiser, David

Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course, your learning about leadership will occur in two ways: --learning about and understanding leadership strategies, values, characteristics, and styles (the context) --analyzing your own perspectives and beliefs about leadership (your interpretation of the context) This course will give you the knowledge and understanding of the qualities and skills necessary to become a leader within various contexts. It will assist you in working in various organizational environments and understanding the impact of globalization and diversity on achieving organizational directives.

Style: 100% Web Based.

Grading: 10% mid exam, 30% final exam, 15% special projects. -self-introduction (1%) -12 discussions (24%) -1 self-selected learning assignment (20%)

ABus 4043 Project Management in Practice
A-F only, 3 credit(s);
Instructor: Griep, Valarie J

Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Project management skills taught in this course will give you a strong foundation upon which to develop your own approach to project management and save you time, aggravation, and resources! This is a hands-on, "how-to-do-it" course that explores the execution of organizational strategy through project simulations, using best practice processes applicable to all industries. Propel your career with key tools, software, and techniques for planning, executing, and controlling projects. Beyond tools and software, the course presents a holistic view of projects and their role in organizations, the behavioral issues that affect all project participants, and ways to manage stakeholders expectations. You will . . . * Learn and apply the keys for a successful project outcome. * Understand how projects can bring about change and improvement in organizations. * Develop a clear, concise, and effective project-organizing document, including objectives, scope, risks, and deliverables. * Construct a work breakdown structure and a project network. * Apply estimated resources to compute a project schedule and end date. * Use techniques such as slack management, leveling, and "crashing" to optimize the end date under typical real-world constraints. * Understand organizational factors leading to project success: o Organizational structure types o Leadership, team, and organization techniques o Organizational culture.

Style: 100% Web Based.

Grading: 5% mid exam, 15% final exam, 35% special projects, 5% written homework, 10% class participation. 5 group cases (15%) 5 practice files (15%) optional extra credit (5 to 10 extra credit pts.)

ABus 4101 Accounting and Finance for Managers
A-F only, 3 credit(s);
Instructor: Vickman, Thomas M

Description: This fully online course is offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. You will look at your career from a new perspective, and increase your contribution to the bottom line, whatever your role. Accounting is the language of business, and finance is not very far behind. Learn to talk the talk and make effective financial contributions. You will learn a variety of basic scenarios using accounting and
finance models and the knowledge and tools for applying them to a particular business sector: retail, manufacturing, government, hospitality, non-profit, medical, construction. Some examples: An IT department head in a medium-size business prepares department budgets and justifies capital expenditures. A language specialist in the U.S. home office of an international company justifies program budgets and ongoing expenditures. A consulting psychologist must know how the numbers come together and what they mean: How much should we bill an hour? What is the minimum number of hours we must bill to break even? How do we project our cash needs? You will learn how to *Distinguish between various management cost terms and concepts. *Identify and understand quality costs and quality programs. *Analyze costing activities to help improve an organization's work flow. *Understand how fixed and variable costs behave, *Calculate the effects on profitability of changes in selling prices, costs, sales mix, and volume. *Prepare various types of budgets. *Calculate standard cost variances and determine what they mean. *Apply decision techniques to determine whether to retain or discontinue a product; make, lease, or buy a part; accept or refuse an order; and expand, shut down, or eliminate a facility or product line. *Apply the concept of the time value of money to determine present and future value.

**Style:** 100% Web Based.

**Grading:** 30% special projects, 10% quizzes. self-introduction and test submission (2%), 9 online discussions (18%), 10 problem sets (40%).

**ABus 4104 Management and Human Resource Practices**
- **A-F only, 3 credit(s);**
- **Instructor:** Benraouane, Sid A.
- **Description:** Introduces students to a broad overview of human resource practices in organizations as well as basic responsibilities of front line managers. Emphasis is on providing day-to-day leadership including organizing work, motivating employees, delegating, coordinating and achieving results. Human resource practices carried out at the front line include selection induction and training of new employees, employee appraisal, handling grievances and discipline.

**ABus 4151 Innovation for Leaders and Organizations**
- **A-F only, 3 credit(s);**
- **Instructor:** Flanders, Gordon R
- **Description:** Innovation as a cornerstone of a knowledge economy. History and value of the innovation process, and importance to individuals and organizations. Strategies to foster personal and collaborative innovation. Responsibilities in personal innovation skill-building and leading innovation in organizations.

**ABus 4515 Strategy and Management for a Sustainable Future**
- **A-F only, 3 credit(s);**
- **Instructor:** Hickle, Garth Thomas
- **Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Explore the meaning and importance of sustainability in business. Characteristics of sustainable environments and their relationship to organizations. Potential economic and strategic enterprise value. Management and leadership to foster and support sustainability. Relationship of sustainable business practices to marketplace trends and realities.
- **Style:** Online
- **Grading:** 14 discussions (25%) -5 short reports or exercises (55%) -Sustainability report (20%)

**ABus 4701 Introduction to Marketing**
- **A-F only, 3 credit(s);**
- **Instructor:** Hansen, Kathryn Louise
- **Description:** Student may contact the instructor or department for information.

**Applied Economics 231 Ruttan Hall**

**ApEc 1001 Orientation to Applied Economics**
- **A-F only, 1 credit(s);**
- **Instructor:** Cooper, Gary M
- **Description:** Introduction to the curriculum offerings, liberal education requirements, employment opportunities and the faculty in the Department of Applied Economics. This is a required one-credit course for all undergraduates majoring in Agricultural and Food Business Management or in Applied Economics. Emphasis will be placed on the historical development of the discipline, the areas of specialization, course work expectations and career planning (e.g., student self-assessment and analysis of interests, skills and abilities; discussion of opportunities in the field--study abroad experiences summer jobs, and internships).
- **Style:** 65% Lecture, 35% Discussion.
- **Grading:** 25% special projects, 60% quizzes, 15% other evaluation. Class attendance
- **Exam Format:** The two quizzes will be multiple choice, short answer and choice of short essay.
ApEc 1101 Principles of Microeconomics
4 credit(s); Credit will not be granted if credit has been received for: ECON 1101; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Okediji, Tade O
Description: Student may contact the instructor or department for information.

ApEc 1101H Principles of Microeconomics
A-F only, 4 credit(s); Honors student, proficiency in high school algebra Credit will not be granted if credit has been received for: APEC 1101; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Liu, Donald J.
Description: Student may contact the instructor or department for information.

ApEc 1251 Principles of Accounting
3 credit(s); 30 cr; not recommended for premajors in Ag Food Bus Mgmt Credit will not be granted if credit has been received for: ACCT 2050;
Instructor: Nefstead, Ward Elliot
Description: Fundamentals of business accounting; basic finance concepts; use of accounting data for income tax and managerial decision making. The following student learning objectives are included: 1) the student will be able to demonstrate an understanding of accounting from a user/consumer point of view; 2) the student will be able to perform the basic activities associated with accounting; 3) the student will be able to describe and contrast various accounting systems; 4) the student will be able to demonstrate proficiency in the analysis/interpretation of financial statements; 5) the student will be able to demonstrate the ability to work with actual case studies or analyze the relevance of accounting.
Style: 60% Lecture, 20% Discussion, 20% Laboratory.
Grading: 40% mid exam, 20% final exam, 20% special projects, 20% class participation.
Exam Format: Multiple choice

ApEc 1905 Topics: Freshman Seminar: The Ordinary Business of Life
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Cooper, Gary M
Description: The world of economics is sometimes referred to as the study of the ordinary business of life. In this course we will discover, reflect on, and teach ourselves about a selected group of topics in the fields of business management and economics. The seminar is "chunked out" into four unique parts. While the first quarter of our meetings will be on business and economic history to provide context (the "Economic Revolution", the Federal Reserve System, and the role of government in the economy), the second quarter of class will analyze "macro" issues related to the domestic and world economies (economic growth, the New Economy, and globalization). The third and fourth quarters of our time together will be "micro" related. We will explore the economics of information, read and solve The Fatal Equilibrium, a mystery novel that highlights several basic economic principles. As part of this class, we will investigate the fields of leadership and business ethics through a series of readings and films. Given the instructor's experience in enrollment management and academic advising, parts of class discussions throughout the term will be dedicated to helping you make your transition to and navigation of the University a smooth one.
Style: 25% Lecture, 25% Film/Video, 50% Discussion. There will be one Saturday afternoon field trip.
Grading: 25% reports/papers, 30% quizzes, 20% class participation, 25% problem solving.
Exam Format: Multiple choice, short answer, and mini essay.

ApEc 3001 Applied Microeconomics: Consumers, Producers, and Markets
4 credit(s); [[1101 or ECON 1101 or 1101H or ECON 1101H], [MATH 1142 or MATH 1271]] or instr consent; intended for undergrads in [Ag/Food Bus Mgmt, Appl Econ] Credit will not be granted if credit has been received for: ECON 3101;
Instructor: Huang, Qiuqiong
Description: Microeconomics studies rational choices under scarcity. This course develops the basic concepts and framework for microeconomic analysis and applies it to analyzing practical economic problems. Topics include: basic supply and demand analysis that examines how changes in market conditions and policies affect market equilibrium price and quantity, how consumers/buyers/individuals make choices to maximize their well-being given their limited income, derive demand curve from decision-making of consumers, how producers/sellers/firms make choices to maximize their profits given their limited budget and
ApEc 3002 Applied Microeconomics: Managerial Economics
4 credit(s);
Instructor: Apland, Jeffrey
Description: This course focuses on the application of microeconomic theory to managerial problems. Lectures, readings, problem sets, lab sessions, case studies, and discussions integrate theory and applications. Topics include: an introduction to regression analysis, demand analysis and demand function estimation, cost analysis and cost function estimation, resource allocation decisions, linear programming, market structure, pricing policy, risk analysis, and capital budgeting. This course is the second in a sequence that begins with ApEc 3001, Consumers and Markets.
Style: 50% Lecture, 20% Discussion, 30% Lab.
Grading: 35% final exam, 30% reports/papers, 35% quizzes.
Exam Format: Problems, short answer, short essay, multiple choice, true/false

ApEc 3006 Applied Macroeconomics: Government and the Economy
3 credit(s); [1102 or Econ 1102], [3001 or Econ 3101] or instr consent Credit will not be granted if credit has been received for: ECON 3102;
Instructor: McCullough, Gerard John
Description: Student may contact the instructor or department for information.

ApEc 3007 Applied Macroeconomics: Policy, Trade, and Development
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Pardey, Philip Gordon
Description: This is an undergraduate course in trade and economic development addressed in five main parts. Part I lays out what we know about the state of economic development worldwide and international trade: including indicators of economic development, how trade has grown over recent centuries, and concerns over globalization and the welfare of developing countries. Part II develops the concept of comparative advantage and the technological basis for trade and the gains from trade. The concepts of productivity, technical change, and the role of research and development will be identified and discussed. Part III of the course will discuss trade policy instruments such as tariffs, subsidies, and trade preferences along with the trade related institutions that make trade and development happen. Part IV revisits the basis for trade, identifying the role of resource endowments. The trade models considered here go beyond identifying the gains from trade to reveal the income distribution consequences of trade. Part V includes a selection of trade-related topics, some of which may be considered in class if time permits. Topics listed include the international movement of capital and labor (i.e., factor mobility), intellectual property and trade regulation, economies of scale and imperfect competition, and trade policies in developing countries.
Style: 30% Lecture, 20% Discussion.
Grading: 25% final exam, 30% reports/papers, 45% quizzes.
Exam Format: Testing understanding of basic economic terms and concepts related to trade and economic development; problem solving true and false and multiple choice questions; empirical problems; and short essays

ApEc 3007 Applied Macroeconomics: Policy, Trade, and Development
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Beddow, Jason
Description: This is an undergraduate course in trade and economic development addressed in five main parts. Part I lays out what we know about the state of economic development worldwide and international trade: including indicators of economic development, how trade has grown over recent centuries, and concerns over globalization and the welfare of developing countries. Part II develops the concept of comparative advantage and the technological basis for trade and the gains from trade. The concepts of productivity, technical change, and the role of research and development will be identified and discussed. Part III of the course will discuss trade policy instruments such as tariffs, subsidies, and trade preferences along with the trade related institutions that make trade and development happen. Part IV revisits the basis for trade, identifying the role of resource endowments. The trade models considered here go beyond identifying the gains from trade to reveal the income distribution consequences of trade. Part V includes a selection of trade-related topics, some of which may be considered in class if time permits. Topics listed include the international movement of capital and labor (i.e., factor mobility), intellectual property and trade regulation, economies of scale and imperfect competition, and trade policies in developing countries.
Style: 30% Lecture, 20% Discussion.
Grading: 25% final exam, 30% reports/papers, 45% quizzes.
Exam Format: Testing understanding of basic economic terms and concepts related to trade and economic development; problem solving true and false and multiple choice questions; empirical problems; and short essays.
solving true and false and multiple choice questions; empirical problems; and short essays

**ApEc 3071 Agriculture and Economic Growth in Developing Countries**

3 credit(s);

**Instructor:** Senauer, Benjamin H

**Description:** This course will cover a range of topics on economic development of low-income countries, with a particular focus on the role of agriculture. The course assumes some familiarity with basic microeconomics. Topics to be covered include agricultural issues in developing countries, hunger, population growth, impacts on the environment and the role of policy, as well as others. A major paper on a topic chosen by the students is required.

**Style:** 40% Lecture, 40% Discussion. Student presentations in class

**Grading:** 50% mid exam, 25% reports/papers, 10% quizzes, 5% in-class presentation, 10% class participation.

**Exam Format:** Multiple choice and essay

**ApEc 3411 Commodity Marketing**

3 credit(s);

**Instructor:** Buhr, Brian L

**Description:** This course exposes the student to the economic concepts related to marketing agricultural commodities. The course examines the conditions of competitive markets, historical perspectives on market institutions and policy, structural characteristics of agricultural commodity sectors, and policies and regulations affecting agricultural marketing of livestock, crop and dairy products. It is intended to serve as a precursor to ApEc 4481: Futures and Options Markets. A key component of the course is learning concepts of price and market analysis. Students will collect data and analyze price changes for a chosen commodity. These tools are commonly used by commodity traders, commodity policy analysts and economists in general.

**Style:** 80% Lecture, 20% Discussion.

**Grading:** 20% mid exam, 20% final exam, 20% reports/papers, 20% written homework, 10% class participation.

**Exam Format:** Multiple Choice, True/False and short problem solving and answer

**ApEc 3501 Agribusiness Finance**

3 credit(s); or instr consent

**Instructor:** Pederson, Glenn Darwin

**Description:** Topics include: analysis of financial performance of firms; evaluation of capital investment projects, selection of financial structure, risk management, and introduction to financial markets and instruments. Teaching is primarily accomplished through lecture, class discussion, problem solving exercises, and case problems. Text and lecture notes are the primary reference materials. A standard introductory business finance text is used.

**Style:** 60% Lecture, 35% Discussion, 5% Laboratory.

**Grading:** 20% mid exam, 30% final exam, 30% quizzes, 20% other evaluation. Decision cases

**Exam Format:** Multiple choice, problems, and essays.

**ApEc 3551 Entrepreneurship Fundamentals for Value-Added Rural Businesses**

A-F only, 3 credit(s);

**Instructor:** Nefstead, Ward Elliot

**Description:** Student may contact the instructor or department for information.

**ApEc 3811 Principles of Farm Management**

3 credit(s);

**Instructor:** Olson, Kent D

**Description:** Strategic and operations aspects of farm management; strategic management; budgeting; production and operations planning; quality management and control; financial analysis and management; investment analysis; land purchase and rental; risk management; contract evaluation; and staffing and organization. Students completing the course will be able to: 1) Define the terms and concepts commonly used in farm management; 2) Apply methods to identify issues and analyze strategic options for farms; 3) Apply operations management techniques within a systems perspective of other parts of the farm, and the uncertain economic, climatic, and biological environments in which farms operate; 4) Apply knowledge obtained in previous courses to farm management problems; and 5) Strengthen skills in teamwork, problem solving, interviewing, speaking, and report writing. The target audience is primarily undergraduates in an agricultural major, although graduate students in agricultural fields may benefit from this course as well.

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 35% mid exam, 35% final exam, 30% problem solving.

**Exam Format:** Short answer, short essay, multiple choice, problems.

**ApEc 3991 Independent Study in Applied Economics**

1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: STAFF  
Description: Independent study and supervised reading and research on subjects and problems not covered in regularly offered courses. Coursework varies by instructor. No exams usually given.

ApEc 4096 Professional Experience Program: Internship  
S-N only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: STAFF  
Description: Professional experience in agribusiness firms or government agencies gained through supervised practical experience; evaluative reports and consultations with faculty advisors and employers.

ApEc 4103 World Food Problems  
3 credit(s); jr or sr or gradCredit will not be granted if credit has been received for: AGRO 4103; Meets CLE req of Global Perspectives  
Instructor: Porter, Paul M  
Description: This course provides a multi-disciplinary look at problems (and some of the possible solutions) affecting food production, storage, and utilization. Presentations and discussions introduce and discuss sometimes conflicting views on population control, use of technology, as well as the ethical and cultural values of people in various countries of the world. Emphasis is placed on the need for governments, international assistance agencies, international research and extension centers, as well as the private business sector to assist in solving these complex problems. Students can enroll in either Agro 4103 or ApEc 4103. Previous background in any of the disciplines is not required, but students should expect upper division and/or graduate level assignments.  
Style: 33% Lecture, 33% Discussion.  
Grading: 60% reports/papers, 25% special projects, 15% class participation.

ApEc 4451W Food Marketing Economics  
3 credit(s); [ECON 1101], [1101H or Econ 1101H], MKTG 3001, 60 cr] or instr consent Credit will not be granted if credit has been received for: APEC 5451; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive  
Instructor: Senauer, Benjamin H  
Description: The course covers the development of a marketing plan/strategy for food products, including developing a target market based on consumer trends and segmentation. The food industry at the retail (foodstore and foodservice) and wholesale levels, plus supply chain management are studied, including the impact of e-commerce both at the consumer and business levels. Current ethical and public policy issues confronting the food industry are examined and considered from various perspectives. Students pursue individual and group projects. Three special projects account for 50% of the grade. They require written reports of about 5 pages and class presentations. The first involves developing a marketing plan for a food product and the second a case study of a marketing decision by a local food business. The last project involves a debate of food and nutrition policy issues by the class. There are several industry speakers. The course fulfills both writing intensive and citizenship and public ethics requirements.  
Style: 50% Lecture, 20% Discussion, 15% Small Group Activities, 10% Student Presentation, 5% Guest Speakers. Presentations and debates  
Grading: 40% mid exam, 40% reports/papers, 10% in-class presentation, 10% class participation. Exams  
Exam Format: Essay, short answer

ApEc 4461 Horticultural Marketing  
A-F only, 3 credit(s);[1101 or Econ 1101], [1101H or Econ 1101H], MKTG 3001, 60 cr] or instr consent Credit will not be granted if credit has been received for: HORT 4461;  
Instructor: Rihn, Alicia Louise  
Description: Horticultural Marketing supports the following SLOs: Can locate and evaluate information on primary and secondary data used in horticultural marketing; Have mastered a body of knowledge by learning the marketing techniques and practices of horticultural products; And can communicate effectively through group discussions and group projects. This course examines several major areas in horticultural marketing. First, we will introduce the difference between horticultural products and commercial commodities; Second, we analyze the functions performed by the horticultural marketing system. We analyze the marketing behavior of horticultural businesses (farms, wholesalers, garden centers), cover the core marketing components that should be used by every small horticultural business; Finally, the basic approaches of consumer research (survey techniques, non-hypothetical experimental approaches, etc.) will be introduced. Students will apply these research approaches to develop marketing plans for horticultural businesses.  
Style: 70% Lecture, 10% Small Group Activities, 5% Student Presentation, 5% Field Trips, 10% Guest Speakers.  
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 40% special projects.

ApEc 5031 Methods of Economic Data Analysis  
3 credit(s);  
Instructor: Beatty, Timothy KM  
Description: Student may contact the instructor or department for information.
ApEc 5151 Applied Microeconomics: Firm and Household
3 credit(s);
Instructor: Coggins, Jay Steven
Description: Quantitative techniques for analysis of economic problems of firm and household. Links between quantitative tools and economic analysis developed to understand economic theory and develop research skills. Quantitative tools include regression analysis and mathematical programming.
Style: 70% Lecture, 15% Discussion, 15% Laboratory.
Grading: 15% mid exam, 45% final exam, 40% problem solving.
Exam Format: Essay/problems

ApEc 5451 Food Marketing Economics
A-F only, 3 credit(s); grad student
Credit will not be granted if credit has been received for: APEC 4451W;
Instructor: Senauer, Benjamin H
Description: The course covers the development of a marketing plan/strategy for food products, including developing a target market based on consumer trends and segmentation. The food industry at the retail (foodstore and foodservice) and wholesale levels, plus supply chain management are studied, including the impact of e-commerce both at the consumer and business levels. Current ethical and public policy issues confronting the food industry are examined and considered from various perspectives. Students pursue individual and group projects. Three special projects account for 50% of the grade. They require written reports of about 5 pages and class presentations. The first involves developing a marketing plan for a food product and the second a case study of a marketing decision by a local food business. The last project involves a debate of food and nutrition policy issues by the class. There are several industry speakers. The course fulfills both writing intensive and citizenship and public ethics requirements.
Style: 50% Lecture, 20% Discussion, 15% Small Group Activities, 10% Student Presentation, 5% Guest Speakers. Presentations and debates
Grading: 40% mid exam, 40% reports/papers, 10% in-class presentation, 10% class participation. Exams
Exam Format: Essay, short answer

ApEc 5511 Labor Economics
3 credit(s);
Instructor: Ritter, Joe
Description: This course examines the economics of labor markets, including theories of labor supply and labor demand, determination of wages, human capital theory, and unemployment. Both theoretical models and empirical applications will be discussed. The course will consider policy applications, including tax and welfare policy, minimum wage laws, and discrimination. Readings will be approximately evenly divided between textbook and journal articles. The target audience for this course is graduate students in applied economics, public policy, economics, and other fields. Required background: intermediate microeconomics, undergraduate econometrics, calculus.
Style: 60% Lecture, 40% Discussion.
Grading: 20% mid exam, 25% final exam, 10% class participation, 20% problem solving. 25% Research Paper
Exam Format: Essay, short answer, graphical/mathematical analysis.

ApEc 5891 Independent Study: Advanced Topics in Farm and Agribusiness Management
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Special topics or individual work.
Style: Varies/individuals approach
Grading: 100% other evaluation. Varies

ApEc 5991 Special Topics and Independent Study in Applied Economics
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Special classes, independent study, and supervised reading and research on subjects not covered in regularly offered courses. Coursework varies by instructor. No exams usually given.

ApEc 8001 Applied Microeconomic Analysis of Consumer Choice and Consumer Demand
A-F only, 2 credit(s);
Instructor: Glewwe, Paul W
Description: Student may contact the instructor or department for information.
ApEc 8002 Applied Microeconomic Analysis of Production and Choice Under Uncertainty
A-F only, 2 credit(s);
Instructor: Glewwe, Paul W
Description: Student may contact the instructor or department for information.

ApEc 8002 Applied Microeconomic Analysis of Production and Choice Under Uncertainty
A-F only, 2 credit(s);
Instructor: Hurley, Terry
Description: Student may contact the instructor or department for information.

ApEc 8202 Mathematical Optimization in Applied Economics
3 credit(s);
Instructor: Apland, Jeffrey
Description: Student may contact the instructor or department for information.

ApEc 8211 Econometric Analysis I
4 credit(s);
Instructor: McCullough, Gerard John
Description: This is the first half of a two semester introduction to applied econometrics. One aim is to introduce students to the use of econometric techniques, including the basic methods of classical regression analysis and inference, as well as some methods commonly used when the classical regression model is not appropriate. A second objective is to present students with sufficient econometric theory to thoroughly understand the techniques they are using, and to prepare them for the second semester. The approach is "hands-on". Students will be expected to analyze a number of economic data sets with programs that they write using MATLAB. Lectures will focus on econometric techniques and theory. Basics of MATLAB programming are covered in section.
Style: 60% Lecture, 20% Discussion, 20% Small Group Activities.
Grading: 30% mid exam, 50% final exam, 20% written homework.

ApEc 8202 Mathematical Optimization in Applied Economics
3 credit(s);
Instructor: Apland, Jeffrey
Description: Student may contact the instructor or department for information.

ApEc 8601 Natural Resource Economics
3 credit(s);
Instructor: Huang, Qiuqiong
Description: The goals of this course are to acquaint students with the major themes and seminal literature in natural resource economics, to build modeling skills for solving various types of resource problems and to familiarize students with current natural resources management and policy issues. The course will examine the optimal management of renewable resources (Fishery, Forestry and Water) and resource use under different property rights / regulation regime (e.g., Open Access, Regulated Open Access and Common Property Resources). Study of nonrenewable resources focuses on the Hotelling model (basic model, extensions and empirical tests) and discussion of energy policy issues. Additional topics include spatially explicit models, resource use under uncertainty, biodiversity and invasive species.

ApEc 8702 Economic and Trade Policy: Sectoral and Institutional Issues
3 credit(s);
Instructor: Smith, Pamela Jane
Description: Student may contact the instructor or department for information.

ApEc 8901 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Davis, Elizabeth E
Description: Student may contact the instructor or department for information.

ApEc 8902 Graduate Seminar: Ph.D. Program
S-N only, 1 credit(s);
Instructor: Hurley, Terry
Description: Student may contact the instructor or department for information.

ApEc 8991 Advanced Topics in Applied Economics
ApEc 8991 Advanced Topics in Applied Economics
1-6 credit(s), max credits 6;
Instructor: Buhr, Brian L
Description: Student may contact the instructor or department for information.

ApEc 8991 Advanced Topics in Applied Economics
1-6 credit(s), max credits 6;
Instructor: Roe, Terry Lee
Description: Student may contact the instructor or department for information.

ApEc 8991 Advanced Topics in Applied Economics
1-6 credit(s), max credits 6;
Instructor: Stinson, Thomas F
Description: Student may contact the instructor or department for information.

ApEc 8991 Advanced Topics in Applied Economics
1-6 credit(s), max credits 6;
Instructor: Davis, Elizabeth E
Description: Student may contact the instructor or department for information.

ApEc 8991 Advanced Topics in Applied Economics
1-6 credit(s), max credits 6;
Instructor: Ritter, Joe
Description: Student may contact the instructor or department for information.

ApEc 8991 Advanced Topics in Applied Economics: PhD Qualifying Paper Seminar I
1 credit(s), max credits 6;
Instructor: Beatty, Timothy KM
Description: Student may contact the instructor or department for information.

Applied Professional Studies 20 Ruttan Hall

APS 4072 What Does It Mean to Be Green?
A-F only, 3 credit(s);
Instructor: Burkhouse, Paul Christopher
Description: Student may contact the instructor or department for information.

APS 5201 Career and Job Search Preparation for Graduate Students
S-N only, 1 credit(s);
Instructor: Kubak, Maggie
Description: Job search preparation and career development tools for all graduate students. Focus on non-academic careers though some class content can be targeted to academic search. Topics: goal setting, networking, job search, resume/CV, interviewing. Offered S/N. Meets 11 times over 15 weeks (plus individual appointments). Assignments include resume/CV, informational interview, career development plan.

APS 8002 Final Project Seminar/Capstone
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Schottel, Janet L
Description: Student may contact the instructor or department for information.

APS 8110 Graduate Seminar Series
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Schottel, Janet L
Description: Student may contact the instructor or department for information.

Arabic 220 Folwell Hall

Arab 1101 Beginning Arabic I
Arab 1101 Beginning Arabic I
5 credit(s); Credit will not be granted if credit has been received for: ARAB 4101;
Instructor: Ben Zahra, Saloua
Description: Student may contact the instructor or department for information.

Arab 1101 Beginning Arabic I
5 credit(s); Credit will not be granted if credit has been received for: ARAB 4101;
Instructor: Elmeski, Mohammed
Description: Student may contact the instructor or department for information.

Arab 3101 Intermediate Arabic
5 credit(s); 1102 or equiv or instr consent Credit will not be granted if credit has been received for: ARAB 4121;
Instructor: Ben Zahra, Saloua
Description: Student may contact the instructor or department for information.

Arab 3101 Intermediate Arabic
5 credit(s); 1102 or equiv or instr consent Credit will not be granted if credit has been received for: ARAB 4121;
Instructor: Mohammed, Sidow Abdishariff
Description: Student may contact the instructor or department for information.

Arab 3101 Intermediate Arabic
5 credit(s); 1102 or equiv or instr consent Credit will not be granted if credit has been received for: ARAB 4121;
Instructor: Elmeski, Mohammed
Description: Student may contact the instructor or department for information.

Arab 3290 Arabic Language Teaching Tutorial
S-N only, 1 credit(s), max credits 2;
Instructor: Khalek, Hisham A
Description: The class trains advanced level students who have received an "A" in Intermediate Arabic 3102, or who are native speakers of Arabic to tutor students of Arabic as a second language. Tutors will also lead weekly conversational sessions.

Arab 4101 Beginning Arabic I
3 credit(s); Grad student Credit will not be granted if credit has been received for: ARAB 1101;
Instructor: Khalek, Hisham A
Description: Arabic 1101 is the first in a sequence of courses aimed at reading, speaking, listening, and writing formal Arabic, also known as Modern Standard Arabic. The class begins with learning the alphabet; pronunciation, reading, and writing, and proceeds into learning basic communicative interactions. The course also introduces students to the cultures of the Arabic-speaking people. The target audience includes undergraduate as well as graduate students.
Style: 40% Lecture, 10% Film/Video, 20% Discussion, 10% Laboratory, 20% Small Group Activities. Culture
Grading: 25% final exam, 10% quizzes, 15% written homework, 35% additional semester exams, 5% attendance, 10% laboratory evaluation.
Exam Format: Vocab knowledge/fill in the blank. Reading Comprehension, Listening comprehension.
known as Modern Standard Arabic. The class begins with learning the alphabet; pronunciation, reading, and writing, and proceeds into learning basic communicative interactions. The course also introduces students to the cultures of the Arabic-speaking people. The target audience includes undergraduate as well as graduate students. The texts used are Assalaamu Aleykum series by Hisham Khalek.

**Style:** 40% Lecture, 10% Film/Video, 20% Discussion, 10% Laboratory, 20% Small Group Activities. Culture

**Grading:** 25% final exam, 10% quizzes, 15% written homework, 35% additional semester exams, 5% attendance, 10% laboratory evaluation.

**Exam Format:** Vocab knowledge/fill in the blank. Reading Comprehension, Listening comprehension.

**Arab 4101 Beginning Arabic I**

3 credit(s); Grad student Credit will not be granted if credit has been received for: ARAB 1101;

**Instructor:** Elmeski, Mohammed

**Description:** Arabic 1101 is the first in a sequence of courses aimed at reading, speaking, listening, and writing formal Arabic, also known as Modern Standard Arabic. The class begins with learning the alphabet; pronunciation, reading, and writing, and proceeds into learning basic communicative interactions. The course also introduces students to the cultures of the Arabic-speaking people. The target audience includes undergraduate as well as graduate students.

**Style:** 40% Lecture, 10% Film/Video, 20% Discussion, 10% Laboratory, 20% Small Group Activities. Culture

**Grading:** 25% final exam, 10% quizzes, 15% written homework, 35% additional semester exams, 5% attendance, 10% laboratory evaluation.

**Exam Format:** Vocab knowledge/fill in the blank. Reading Comprehension, Listening comprehension.

**Arab 4121 Intermediate Arabic I**

3 credit(s); [ARAB 3102 or equiv], grad student Credit will not be granted if credit has been received for: ARAB 3101;

**Instructor:** Ben Zahra, Saloua

**Description:** Student may contact the instructor or department for information.

**Arab 4121 Intermediate Arabic I**

3 credit(s); [ARAB 3102 or equiv], grad student Credit will not be granted if credit has been received for: ARAB 3101;

**Instructor:** Mohammed, Sidow Abdishariff

**Description:** Student may contact the instructor or department for information.

**Arab 4121 Intermediate Arabic I**

3 credit(s); [ARAB 3102 or equiv], grad student Credit will not be granted if credit has been received for: ARAB 3101;

**Instructor:** Elmeski, Mohammed

**Description:** Arabic 3101 is a continuation of Arabic 1102. It is designed to further develop language proficiency in modern standard Arabic in the four language skills. In speaking, the focus is on the use of everyday expressions through discussion and presentations. In reading, the focus is on reading content oriented paragraphs from the textbook. Writing is emphasized especially through writing compositions and homework assignments. Listening exercises and drills are utilized in class by listening to authentic material and by the use of interactive programs in the language lab. The course also trains and prepares students to take the Language Proficiency Exam. In addition, students will further develop and enhance their knowledge of the culture of the Arab world. The target audience is undergraduate and graduate students.

**Style:** 30% Lecture, 10% Film/Video, 20% Discussion, 10% Laboratory, 30% Small Group Activities.

**Grading:** 25% final exam, 30% quizzes, 15% written homework, 5% attendance, 15% journal, 10% laboratory evaluation.

**Arab 5101 Advanced Arabic I**

3 credit(s), max credits 4, 1 completion allowed;

**Instructor:** Khalek, Hisham A

**Description:** Arabic 5101 is a continuation of Arabic 3102 and the first in a two-course series. Students are required to pass the Language Proficiency Exam (LPE) and/or attain a B grade or better in Arabic 3102 in order to continue with Advanced Arabic 5101. The course is designed to reinforce Arabic language skills learned in the beginning and intermediate levels and introduce new knowledge of diverse nature in order to advance language proficiency. In speaking, the course trains students to speak crisp and clear Arabic by presenting "news of the hour - akhbarus-saa'a" on varied topics and to understand and use complex and compound sentences. In reading, the course guides students to read content-based texts. Writing is enhanced by drafting weekly compositions, homework assignments, and translations. Listening exercises and drills are utilized in class as well as in the language lab by listening and watching audio and video excerpts. The course is also aimed at advancing students' knowledge of the cultures of the Arab world. The target audience is undergraduate and graduate students.

**Style:** 10% Lecture, 10% Film/Video, 20% Discussion, 10% Laboratory, 10% Small Group Activities, 40% Student Presentation.

**Grading:** 15% final exam, 20% reports/papers, 25% quizzes, 15% written homework, 10% attendance, 5% in-class presentation, 10% laboratory evaluation.
Exam Format: Reading comprehension, listening comprehension, Translations, and vocab knowledge.

Architecture 110 Rapson Hall

Arch 1701 The Designed Environment
A-F only, 3 credit(s);
Instructor: Lavine, Lance A
Description: Purpose: Arch 1701 is intended to introduce students with no prior academic experience in the field to the disciplines of architecture and landscape architecture. This class will be based on the assumption that these disciplines are idea-making enterprises. Its focus will be on the kinds of ideas that our constructed environments make and the way in which buildings and their landscapes participate in forming these constructs. Introduction: In this introductory course, special emphasis will be placed on why architecture and landscape architecture constitute unique ways in which people have formed ideas about the world that they construct to inhabit. The significance of architecture and landscape architecture is found, as it is in other arts, in an interpretation of the ideas that its constructions propose. These ideas necessarily cross many conventional boundaries of thought. They are at once utilitarian and symbolic, quantitative and qualitative, and material and metaphorical. The constructed environment provides an endless source of ideas that symbolically allow us to reside in nature with each other.

Arch 1701H Honors: The Designed Environment
A-F only, 3 credit(s);
Instructor: Lavine, Lance A
Description: Purpose: Arch 1701 is intended to introduce students with no prior academic experience in the field to the disciplines of architecture and landscape architecture. This class will be based on the assumption that these disciplines are idea-making enterprises. Its focus will be on the kinds of ideas that our constructed environments make and the way in which buildings and their landscapes participate in forming these constructs. Introduction: In this introductory course, special emphasis will be placed on why architecture and landscape architecture constitute unique ways in which people have formed ideas about the world that they construct to inhabit. The significance of architecture and landscape architecture is found, as it is in other arts, in an interpretation of the ideas that its constructions propose. These ideas necessarily cross many conventional boundaries of thought. They are at once utilitarian and symbolic, quantitative and qualitative, and material and metaphorical. The constructed environment provides an endless source of ideas that symbolically allow us to reside in nature with each other.

Arch 2301 Introduction to Drawing in Architecture
A-F only, 4 credit(s);
Instructor: STAFF
Description: This course is meant to introduce an architectural way of visual thinking. It is also intended to familiarize the students with basic concepts of visual notation, techniques, and skills. The educational objectives of Arch 1301 are to enhance students' abilities to see visual phenomena such as space, light, and/or form; to teach students how to combine seeing with drawing in the way that is specific to the discipline and profession of architecture; to introduce drawing as a process of visual exploration; to introduce architectural concepts and systems of visual notations and the basic drawing skills and techniques (free-hand sketching and hard-line drafting). Note: Requirements may vary depending on the instructor who teaches a particular section.
Style: 10% Lecture, 20% Discussion. drawing exercises
Grading: 20% class participation. 60% three graded reviews; 20% final assignment
Exam Format: review of drawing

Arch 3150 Topics in Architecture: Architecture in Transformation
3 credit(s), max credits 24, 4 completions allowed;
Instructor: Brownell, Blaine Erickson
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Box Problem
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Designing within the Conceptual Frame
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.
Arch 3250 Design Workshop: Engaging Urbanism: Architecture -- Infrastructure
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Painting Architecture
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Saving Minnesota -- 10 Buildings at a Time
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Design and Perception in Virtual Reality
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Furniture Design and Fabrication
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Building the BDA
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Building the BDA
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Analytical Modeling of Contemporary Architecture
A-F only, 3 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Architecture of Dr. Seuss
A-F only, 3 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Architectural Photography: Imaging by Design
A-F only, 4 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Games for Change: New Rules of Play for Education
A-F only, 4 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Sustainability and Beauty
A-F only, 2 credit(s), max credits 15, 6 completions allowed;
Instructor: Roe, Sharon Louise
Arch 3281 Undergraduate Architecture Studio I  
A-F only, 6 credit(s);  
Instructor: Clark,Dan  
Description: Student may contact the instructor or department for information.

Arch 3301 Drawing for Design in Architecture  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: This is a follow-up course for Arch/LA 1301. It is intended to explore ways of seeing and ways of exploring concepts behind objects, buildings, and places. These explorations will include: historical and theoretical aspects of depicting architecture that may be found in paintings and architectural drawings; concepts of structure and order of form; conventional and experimental strategies for depicting space, light, and "time" (i.e. projection systems, multiple, and sequential drawings); pencil, pastels, and ink drawing techniques and skills. Though nothing will be "designed" in this course, the educational objective of this sequence of exercises is to introduce issues and develop skills which are essential for a design studio. Note: Requirements may vary depending on the instructor who teaches a particular section.  
Style: 10% Lecture, 20% Discussion. drawing exercises  
Grading: 25% class participation. 50% final portfolio; 25% final assignment  
Exam Format: review of drawings

Arch 3351 AutoCAD I  
3 credit(s); Arch major or BED major or instr consent Credit will not be granted if credit has been received for: ARCH 5351;  
Instructor: Anderson,Kristine  
Description: Basic concepts, tools, and techniques of computer-aided drawing with current AutoCAD Release. Strategies and techniques for producing dimensioned and annotated drawings suitable for plotting, and an introduction to 3-D drawing capabilities. Use of dimension variables, attributes, blocks, and symbols

Arch 3381 Introduction to Computer Aided Architectural Design  
A-F only, 3 credit(s);  
Instructor: Dozier,James  
Description: Student may contact the instructor or department for information.

Arch 3411V Architectural History to 1750  
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive  
Instructor: Satkowski,Leon  
Description: This course investigates architecture broadly considered from Egypt to the early 18th century in Europe and the New World. The basic tenet of the course is the study of our constructed environment--buildings, cities, landscapes. Although the course focuses on western architecture, approximately one third of the lectures are devoted to China, Japan, and the Indian subcontinent. Weekly recitations will both augment lectures and introduce students to looking at the built environment in the Twin Cities area. The course is aimed at students planning undergraduate majors in architecture, landscape architecture, art history, and anyone with an interest in the visual arts. Required books will include Moffett et al. on the period as a whole, Mac Donald on the Pantheon, and O'Gorman on an introduction to analyzing buildings.  
Style: 66% Lecture, 33% Discussion.  
Grading: 30% mid exam, 30% final exam, 20% reports/papers, 20% quizzes.  
Exam Format: Essay, slide ID

Arch 3411W Architectural History to 1750  
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive  
Instructor: Satkowski,Leon  
Description: This course investigates architecture broadly considered from Egypt to the early 18th century in Europe and the New World. The basic tenet of the course is the study of our constructed environment--buildings, cities, landscapes. Although the course focuses on western architecture, approximately one third of the lectures are devoted to China, Japan, and the Indian subcontinent. Weekly recitations will both augment lectures and introduce students to looking at the built environment in the Twin Cities area. The course is aimed at students planning undergraduate majors in architecture, landscape architecture, art history, and anyone with an interest in the visual arts. Required books will include Moffett et al. on the period as a whole, Mac Donald on the Pantheon, and O'Gorman on an introduction to analyzing buildings.  
Style: 66% Lecture, 33% Discussion.  
Grading: 30% mid exam, 30% final exam, 20% reports/papers, 20% quizzes.  
Exam Format: Essay, slide ID

Arch 3641 Introduction to Heritage Preservation  
A-F only, 3 credit(s);  
Instructor: Donofrio,Gregory  
Description: This class explores the potential of, and challenges to, heritage preservation in the United States. As a growing social movement and interdisciplinary field, heritage preservation's concepts and tools are now widely utilized by architects, planners, and
Arch 3711V Honors: Environmental Design and the Sociocultural Context

A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Robinson, Julia Williams
Description: Environmental Design and the Sociocultural Context addresses how the built environment affects people in their everyday life and how cultural perspectives affect the way environments are constructed. Students examine the responsibility of the design professional to the human community and its shared environment, global, local, political and ethnic. Additionally the course develops skills in studying written texts, as well as environments and professional institutions from a cultural perspective. As it is a writing intensive class, students will learn to write essays that identify important issues, take a position and make an argument using evidence. By the end of the semester the participating student is expected to be able to: EMPLOY CRITICAL THINKING SKILLS FOUNDED IN A CULTURAL APPROACH. Identify your personal cultural position as reflected in ethnicity, race, religion and gender. Develop an understanding of your cultural bias as well as develop empathy with other perspectives Construct sound arguments using evidence that develop, defend or challenge your personal values and beliefs as residents of the United States and members of a global society *READ PLACES WITHIN OUR CULTURE -Understand the attitudes, cultural practices and institutions places represent, and what role they play in society -Apply specific methods and tools that enable detailed description, analysis, and interpretation of a particular set of environments (reflection and critique) -Apprehend the various frames of reference of a place (e.g. aesthetic, historical, economic, political, moral). -Perceive how our bodies, everyday activities, and culture shape and are shaped by places. -Realize that places evolve from a particular cultural and historical context UNDERSTAND THE ROLE OF A PROFESSIONAL IN SUPPORT OF SOCIETY’S WELFARE -Understand the ethics of the design professions and how they have evolved in response to group processes both within the professions and with society at large - Examine the design professions in relation to active citizenship and civic life.

Arch 3711W Environmental Design and the Sociocultural Context

A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Robinson, Julia Williams
Description: Environmental Design and the Sociocultural Context addresses how the built environment affects people in their everyday life and how cultural perspectives affect the way environments are constructed. Students examine the responsibility of the design professional to the human community and its shared environment, global, local, political and ethnic. Additionally the course develops skills in studying written texts, as well as environments and professional institutions from a cultural perspective. As it is a writing intensive class, students will learn to write essays that identify important issues, take a position and make an argument using evidence. By the end of the semester the participating student is expected to be able to: EMPLOY CRITICAL THINKING SKILLS FOUNDED IN A CULTURAL APPROACH. Identify your personal cultural position as reflected in ethnicity, race, religion and gender. Develop an understanding of your cultural bias as well as develop empathy with other perspectives Construct sound arguments using evidence that develop, defend or challenge your personal values and beliefs as residents of the United States and members of a global society *READ PLACES WITHIN OUR CULTURE -Understand the attitudes, cultural practices and institutions places represent, and what role they play in society -Apply specific methods and tools that enable detailed description, analysis, and interpretation of a particular set of environments (reflection and critique) -Apprehend the various frames of reference of a place (e.g. aesthetic, historical, economic, political, moral). -Perceive how our bodies, everyday activities, and culture shape and are shaped by places. -Realize that places evolve from a particular cultural and historical context UNDERSTAND THE ROLE OF A PROFESSIONAL IN SUPPORT OF SOCIETY’S WELFARE -Understand the ethics of the design professions and how they have evolved in response to group processes both within the professions and with society at large - Examine the design professions in relation to active citizenship and civic life.
Arch 4150 Topics in Architecture: Whole Building Analysis  
A-F only, 3 credit(s), max credits 24, 6 completions allowed;  
Instructor: Abraham, Loren E  
Description: This course will provide opportunities to learn about energy use and energy conservation measures employed in buildings; gain experience with methods for evaluating ecological performance of buildings including energy demand, thermal loads and the process for achieving optimal integrated design solutions. In addition students will become able to perform daylighting and energy simulation and performance assessment of selected buildings; understand the main principles of the thermal envelope, materials and construction including living walls and roof systems, internal gains, operation controls, weather, HVAC systems, zoning and become familiar with the process of Building Life-cycle Cost Analysis. The deliverables will be project based and student teams will work directly for an actual "client" on planned building projects for the University of Minnesota Campus. 
Style: 30% Lecture, 40% Laboratory, 20% Student Presentation, 10% Demonstration. Class meets 2.5 hours/week. There will be an equivalent amount of work outside of class.  
Grading: 40% special projects, 40% in-class presentation, 10% class participation, 10% laboratory evaluation. There are 6 projects and three presentations comprising 80% of the grade. The remaining evaluation will be based on a combination of in-class participation and lab exercises.  
Exam Format: No exams will be administered. There will be 1 non-graded quiz to assess initial understanding of principles.

Arch 4150 Topics in Architecture: Portfolio Design  
A-F only, 3 credit(s), max credits 24, 6 completions allowed;  
Instructor: McQuade, Martha Wilha  
Description: Student may contact the instructor or department for information.

Arch 4150 Topics in Architecture: World Heritage Conservation  
A-F only, 3 credit(s), max credits 24, 6 completions allowed;  
Instructor: Chen, Arthur Hui-Min  
Description: Student may contact the instructor or department for information.

Arch 4150 Topics in Architecture: The Art of Daylighting Design  
A-F only, 3 credit(s), max credits 24, 6 completions allowed;  
Instructor: Guzowski, Mary M  
Description: Daylighting design and luminous phenomena have long captured the imagination of designers and architects. The beauty and power of light and shadow can be found in the most ancient and humblest of structures. This seminar explores the many roles of daylighting in architectural design and how it is shaped by the intersection of both poetic and performance goals and aspirations. While daylight plays an increasingly important role in meeting quantitative sustainable design goals to reduce energy and resource consumption, daylight goes far beyond resource efficiency to embody qualitative (and often immeasurable) design dimensions related to aesthetics, beauty, comfort, health, and well-being. Daylighting design is as much an art as it is a science. The qualitative dimensions of daylighting are equally important as reducing waste, energy consumption, and environmental impacts. This seminar will study the intersection of both the poetic and performance attributes of daylighting design through in-depth case studies of leading architects noted for their mastery of daylighting design. A select group of case study buildings and rooms of leading architects will be compared and contrasted to gain insight into larger luminous design principles, concepts, strategies, and lessons for contemporary architectural practice. Physical and computer models, photography, diagramming, and photometric analysis will be used to understand the design strategies and details of the case study masters. The case studies provide a vehicle to investigate and compare and contrast daylighting design concepts and strategies at the site, building, room, and detail scales. The exercises will develop incrementally over the semester. During weeks 1-6, students will work in a small team to assess one case study building/room. The second half of the semester will involve individual student explorations and experimentations of daylighting interventions to one case study room to compare the luminous effects of altering qualitative and quantitative design variables at the scales of the room, window, and design details. Throughout the semester, additional case studies from practice and fieldwork will be introduced through brief lectures and discussions to further enrich students' vocabulary of daylighting strategies as appropriate to place, program, and desired qualities and characteristics of light. The objectives for the course are to: 1. Compare and contrast poetic and performance daylighting design principles, concepts, and strategies. 2. Develop a comparative knowledge of daylighting theories and practices from exemplary case studies. 3. Gain the knowledge and skills necessary to effectively develop, test, and assess quantitative and qualitative daylighting strategies for architectural design. 4. Encourage students to develop a personal daylighting design theory, process, and practice.

Arch 4150 Topics in Architecture: Traits & Form Performance  
A-F only, 3 credit(s), max credits 24, 6 completions allowed;  
Instructor: Ibarra Sevilla, Benjamin  
Description: The overall objective of this class is to engage a learning environment in which the creative practice of architecture does not follow spontaneous inspirations, but a process founded on two critical aspects: history and geometry. Simple form finding is not
what intrigues to this class, but the structural behavior of the form. This connection between form and structure was greatly achieved, for example, in Gothic cathedrals and the work of Antony Gaudi. That is why we will study them. Stereotomy, a technique mediating between the art of solid-shaping, geometry and history of construction, is the underlying framework of this seminar. Most stereotomic studies focus on historic buildings, and this class will review those historic solutions focusing on stonecutting. Nevertheless, this seminar’s investigations will put a great effort on studying the role of stereotomy in contemporary architectural design. The experimentations to develop in this class will use stereotomy as a mean to understand the relationship between form-performance, structures, and materials in architecture. In order to learn about the structural role of this form - structure - material relationship, students will be immersed in hands-on exercises by means of models, analog and digital drawings and fabrications.

Style: 15% Lecture, 35% Discussion, 35% Small Group Activities, 15% Student Presentation.
Grading: 30% reports/papers, 40% in-class presentation, 30% class participation.

Arch 4194H Thesis/Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Jara, Cynthia
Description: This seminar is for honors students who are working on their honors theses. It provides a framework that supports students’ individualized work as well as the opportunity to present it and receive feedback from faculty and other students.

Arch 4194H Thesis/Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Solomonson, Katherine Mary
Description: This seminar is for honors students who are working on their honors theses. It provides a framework that supports students’ individualized work as well as the opportunity to present it and receive feedback from faculty and other students.

Arch 4283 Undergraduate Architecture Studio III
A-F only, 6 credit(s);
Instructor: Paulsen, Kristen S
Description: Student may contact the instructor or department for information.

Arch 4321 Architecture in Watercolor
A-F only, 3 credit(s); 1301 Credit will not be granted if credit has been received for: ARCH 5321;
Instructor: Fogg, Monica
Description: Watercolor as a tool in design process. Foundation principles, techniques, medium, tools, materials. Color relationships, mixing, composition, applications to design.

Arch 4361 3-D Computer Architectural Modeling and Design
A-F only, 3 credit(s); 3351, Arch major Credit will not be granted if credit has been received for: ARCH 5361;
Instructor: Dozier, James
Description: This class explores the use of 3-D computer modeling as a tool for representation in both abstract and realistic ways. Students will gain a good basic working knowledge of computer modeling software through assignments that include the creation and arrangement of objects, setting up lighting, developing surface materials, and creating still renderings and animations. The class also explores ways in which computer visualization can be used throughout the design process for: design exploration, feedback during the development of design ideas, and realistic representation of fully formed designs.

Arch 4425 Baroque Architecture
A-F only, 3 credit(s); 3411 Credit will not be granted if credit has been received for: ARCH 5425;
Instructor: Satkowski, Leon
Description: Student may contact the instructor or department for information.

Arch 4432 Modern Architecture
A-F only, 3 credit(s); 3412 or instr consent Credit will not be granted if credit has been received for: ARCH 5432;
Instructor: Solomonson, Katherine Mary
Description: Student may contact the instructor or department for information.

Arch 4511 Materials and Methods I
A-F only, 3 credit(s);
Instructor: Lutz, James Martin
Description: Student may contact the instructor or department for information.
Arch 4571 Architectural Structures I
A-F only, 3 credit(s);
Instructor: Strothman,Susan C

Arch 4671 Historic Preservation
A-F only, 3 credit(s);
Instructor: Donofrio,Gregory
Description: Student may contact the instructor or department for information.

Arch 4672 Historic Building Conservation
A-F only, 3 credit(s);
Instructor: Grover,Todd Andreas
Description: In this course, students will conduct extensive analysis of the Minneapolis Armory, the inside and outside of which will serve as a laboratory to develop material conservation recommendations for a Historic Building Conditions Survey. Students will learn about historic building materials and structural systems, causes of their deterioration, and appropriate methods for their repair and conservation. Topics covered include an examination of the historical building materials most frequently encountered in historic preservation: wood, masonry, terra-cotta, plaster, paint, finish hardware, metals, roofing, and glass. Material is presented through illustrated lectures, guest lecturers, on-site building investigations, and related field trips. Assignments include a Research Paper and portions of the Conditions Survey.

Arch 4701W Introduction to Urban Form and Theory
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Jara,Cynthia
Description: Cities have to be made - thought about, desired, planned, engineered, built, lived in, and maintained. Throughout this process cites acquire layers of history, not just architectural history and the history of formal changes and development, but political, military, economic, and cultural history. Arch 4701, Introduction to Urban Form, grapples with these concepts and attempts to lay a foundation for ordering and understanding them.

Arch 5321 Architecture in Watercolor
A-F only, 3 credit(s);M Arch grad student or instr consent Credit will not be granted if credit has been received for: ARCH 4321;
Instructor: Fogg,Monica
Description: Student may contact the instructor or department for information.

Arch 5361 3-D Computer Architectural Modeling and Design
A-F only, 3 credit(s);M Arch majorCredit will not be granted if credit has been received for: ARCH 4361;
Instructor: Dozier,James
Description: Student may contact the instructor or department for information.

Arch 5361 3-D Computer Architectural Modeling and Design
A-F only, 3 credit(s);M Arch majorCredit will not be granted if credit has been received for: ARCH 4361;
Instructor: Dozier,James
Description: The class explores the use of 3D computer modeling as a tool for representation in both abstract and realistic ways. Participants will gain a good working knowledge of computer modeling software through assignments that include the creation, manipulation and arrangement of three-dimensional forms during the design of abstract environments, use of lighting as a design element, and development of surface materials as an integral part of a fully formed design. In addition the class explores ways in which computer visualization can be used throughout the design process - for design exploration, for feedback during the development of design ideas, and for realistic representation of fully formed designs. Assignments include still renderings and animations, along with research and writing components. The major assignment in this course entails creation of a detailed building model and animation which explores and presents a significant work of architecture.

Arch 5381 Introduction to Computer Aided Architectural Design
A-F only, 3 credit(s);
Instructor: Dozier,James
Description: Student may contact the instructor or department for information.
Arch 5411 Principles of Design Theory
A-F only, 3 credit(s);
Instructor: Fisher, Thomas Ray
Description: This course focuses on our thinking about architecture and the built environment around us, how it reflects our ideas about the world and how it affects us in our daily lives. We will read and discuss some of the classic texts in the field, debate current issues in architecture, and look at the ways in which architects come up with ideas and then realize them in their work. We will also use a variety of means - roll playing, speed dating, peer teaching, and campus touring, among other methods - to explore what ideas about the world most appeal to us and why.

Arch 5425 Baroque Architecture
A-F only, 3 credit(s); MS Arch or M Arch major or instr consent Credit will not be granted if credit has been received for: ARCH 4425;
Instructor: Satkowski, Leon
Description: Student may contact the instructor or department for information.

Arch 5432 Modern Architecture
A-F only, 3 credit(s); MS Arch or M Arch major or instr consent Credit will not be granted if credit has been received for: ARCH 4432;
Instructor: Solomonson, Katherine Mary
Description: Student may contact the instructor or department for information.

Arch 5515 Technology One: Building Materials and Construction Systems
A-F only, 3 credit(s);
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 5517 Technology Three: Structural Systems
A-F only, 3 credit(s);
Instructor: Smith, Dean Russell
Description: Student may contact the instructor or department for information.

Arch 5541 Material Strategies
A-F only, 3 credit(s);
Instructor: Brownell, Blaine Erickson
Description: With the explosion of new materials and technologies available for building construction, it is critical that architects confront this broadening palette in order to understand the implications for future structures. Moreover, the growing awareness of energy and material resource scarcity, global warming, and other environmental concerns has brought unprecedented change to how we relate to the physical environment, requiring us to re-assess conventional methods of material selection and implementation. In this seminar, we will consider a new set of strategies for material approaches based on issues related to global material and resource flows, technological trajectories, and potential sociocultural effects. Students will gain expertise regarding material theory, building technology, and the role of material selection in the design process. Course content will include an assessment of the primary material categories and their environmental implications, as well as emerging debates concerning technical versus biological nutrient cycles, hydrocarbon versus carbohydrate-based economies, and so-called high-tech versus low-tech design approaches.
Style: 20% Lecture, 40% Discussion, 33% Student Presentation, 7% Demonstration.
Grading: 45% reports/papers, 5% special projects, 30% in-class presentation, 20% class participation.

Arch 5550 Topics in Technology: Whole Building Analysis
A-F only, 3 credit(s), max credits 12, 3 completions allowed;
Instructor: Abraham, Loren E
Description: This course will provide opportunities to learn about energy use and energy conservation measures employed in buildings; gain experience with methods for evaluating ecological performance of buildings including energy demand, thermal loads and the process for achieving optimal integrated design solutions. In addition students will become able to perform daylighting and energy simulation and performance assessment of selected buildings; understand the main principles of the thermal envelope, materials and construction including living walls and roof systems, internal gains, operation controls, weather, HVAC systems, zoning and become familiar with the process of Building Life-cycle Cost Analysis. The deliverables will be project based and student teams will work directly for an actual "client" on planned building projects for the University of Minnesota Campus.
Style: 30% Lecture, 40% Laboratory, 20% Student Presentation, 10% Demonstration. Class meets 2.5 hours/week. There will be an equivalent amount of work outside of class.
Grading: 45% special projects, 40% in-class presentation, 10% class participation, 10% laboratory evaluation. There are 6 projects...
Arch 5672 Historic Building Conservation
A-F only, 3 credit(s);
Instructor: Donofrio,Gregory
Description: The overall objective of this class is to engage a learning environment in which the creative practice of architecture does not follow spontaneous inspirations, but a process founded on two critical aspects: history and geometry. Simple form finding is not what intrigues to this class, but the structural behavior of the form. This connection between form and structure was greatly achieved, for example, in Gothic cathedrals and the work of Antony Gaudi. That is why we will study them. Stereotomy, a technique mediating between the art of solid-shaping, geometry and history of construction, is the underlying framework of this seminar. Most stereotomic studies focus on historic buildings, and this class will review those historic solutions focusing on stonecutting. Nevertheless, this seminar's investigations will put a great effort on studying the role of stereotomy in contemporary architectural design. The experimentations to develop in this class will use stereotomy as a mean to understand the relationship between form-performance, structures, and materials in architecture. In order to learn about the structural role of this form - structure - material relationship, students will be immersed in hands-on exercises by means of models, analog and digital drawings and fabrications.
Style: 15% Lecture, 35% Discussion, 35% Small Group Activities, 15% Student Presentation.
Grading: 30% reports/papers, 40% in-class presentation, 30% class participation.

Arch 5671 Historic Preservation
3 credit(s);
Instructor: Donofrio,Gregory
Description: Student may contact the instructor or department for information.

Arch 5672 Historic Building Conservation
3 credit(s);
Instructor: Grover, Todd Andreas  
Description: In this course, students will conduct extensive analysis of the Minneapolis Armory, the inside and outside of which will serve as a laboratory to develop material conservation recommendations for a Historic Building Conditions Survey. Students will learn about historic building materials and structural systems, causes of their deterioration, and appropriate methods for their repair and conservation. Topics covered include an examination of the historical building materials most frequently encountered in historic preservation: wood, masonry, terra-cotta, plaster, paint, finish hardware, metals, roofing, and glass. Material is presented through illustrated lectures, guest lecturers, on-site building investigations, and related field trips. Assignments include a Research Paper and portions of the Conditions Survey.

Arch 5674 World Heritage Conservation  
A-F only, 3 credit(s);  
Instructor: Chen, Arthur Hui-Min  
Description: Student may contact the instructor or department for information.

Arch 5731 Territorial City  
A-F only, 3 credit(s);  
Instructor: Conway, William F  
Description: Student may contact the instructor or department for information.

Arch 8251 Graduate Architectural Design I  
A-F only, 9 credit(s);  
Instructor: Roe, Sharon Louise  
Description: Student may contact the instructor or department for information.

Arch 8253 Graduate Architectural Design III  
A-F only, 9 credit(s);  
Instructor: Ganser, Robert Jon  
Description: Student may contact the instructor or department for information.

Arch 8255 Graduate Architectural Design V  
A-F only, 6 credit(s), max credits 12;  
Instructor: Conway, William F  
Description: Student may contact the instructor or department for information.

Arch 8567 Site and Water Issues in Sustainable Design  
A-F only, 3 credit(s);  
Instructor: Macdonagh, L Peter  
Description: This course looks at the issues of water in relation to buildings, sites and sustainable use of water. The "Urban Water Cycle" will be used to calibrate the sustainable use of urban water resources. Water balance formulas as well as water use calculators and sustainable tools will be used to mitigate the impacts of development on the existing urban water cycle. The class will look at water at both a watershed and site scale comparing existing water infrastructure with a new concepts of sustainable water strategies. This is a research course but all the class's exercises are design oriented. Students will have to apply the contents of the course to a design problem that required the student solve the interior and exterior impacts of urban water using design solutions.

Art  
Regis Center for Art

ArtS 1001 Concepts in Visual Art  
4 credit(s);  
Instructor: STAFF  
Description: Concepts of visual art-making in contemporary and historical contexts. The media, environment, and concerns of the practicing artist. Creative process, visual expression, criteria. Aesthetic foundation for beginning studio courses. Visiting artists, museum and gallery visits, creative presentations. Required of all art majors.

ArtS 1101 Drawing  
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2101; Meets CLE req of Arts/Humanities  
Instructor: STAFF  
Description: Introduction to fundamental principles and processes of drawing; exploration of various drawing media. Work from still life, nature, the life model, and imagination.
ArtS 1101 Drawing
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2101; Meets CLE req of Arts/Humanities
Instructor: Gray, Lynn Arlyn
Description: Introduction to fundamental principles and processes of drawing; exploration of various drawing media. Work from still life, nature, the life model, and imagination.

ArtS 1102 Painting
4 credit(s); 1101 or 2101 Note: Students without stated prerequisites will not be allowed to continue in this course. Credit will not be granted if credit has been received for: ARTS 2102;
Instructor: STAFF
Description: Introduction to painting with attention to understanding and applying the fundamental principles of spatial organization and color interaction.

ArtS 1301 Sculpture
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2301; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: An introduction to sculptural practice examining materials, methods, concepts, and history with emphasis on the correlation between concepts and materials. Work in clay, plaster, metal, and wood.

ArtS 1501 Printmaking: Intaglio and Lithography
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2501; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: 1501-005 Introduction to Printmaking: Intaglio and Lithography. This is an introductory course that explores the concepts and techniques of intaglio and litho processes. Students acquire skill and understanding into the aesthetics of of the print, the role of the multiple and the nature of graphics as it relates to personal expression. Familiarization to strategies and concepts of printmaking through historical and contemporary usage is addressed. Emphasis on understanding the interrelationship of process, materials and ideas. This course is designed for undergraduate students across disciplines. It introduces techniques artists employ in the development of visual statements. Hands-on involvement in the production of artwork.
Style: 40% Lecture, 30% Discussion, 30% Laboratory.
Grading: 15% mid exam, 10% reports/papers, 25% class participation, 50% other evaluation. creative engagement
Exam Format: short answer, multiple choice

ArtS 1502 Printmaking: Relief, Screen, and Digital Processes
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2502; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: Introduction to techniques of relief (linoleum and woodcut), screenprint and digital printmaking. Historical approaches and use through contemporary materials, concepts and practices. Emphasis on the interrelationship of process, materials and ideas.

ArtS 1601 Experimental and Media Arts
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2601; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: This course is intended for the beginning level or non-experienced student interested in exploring new tools, technologies and processes in electronic and digital art. The class includes assignments focused on digital imaging making, digital video, digital sound, digital animation, interactive processes and basic programming languages. Students will explore the developing aesthetic and theoretical domains presented with the intergration of new technologies into creative art practice.
Style: 20% Lecture, 20% Discussion. 60% creative art production
Grading: 10% in-class presentation, 20% class participation, 70% other evaluation. Production and critical evaluation of student art projects

ArtS 1701 Photography
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2701; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: Course presents conceptual, technical, and historical aspects of photography within the fine arts context. Emphasis on the creative process through hands-on experience in use of camera, film development, enlarging, and printing. Silver processes. Student needs a 35mm, single lens reflex film camera.
Style: 25% Lecture, 25% Discussion, 50% Laboratory.
Grading: 15% mid exam, 30% final exam, 20% in-class presentation, 25% laboratory evaluation, 10% problem solving.
Exam Format: performance
ArtS 1702 Digital Photography
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2702; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: Introduction to conceptual, technical and historical aspects of photography as a creative medium using digital technology. Digital image capture, related software, digital output and studio procedures. Historical issues, contemporary practice.

ArtS 1801 Ceramics
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2801; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: Fundamentals of wheel-thrown and hand-built ceramics as forms of creative expression. Introduction to clay, glazes, and firing techniques.

ArtS 1801 Ceramics
4 credit(s); Credit will not be granted if credit has been received for: ARTS 2801; Meets CLE req of Arts/Humanities
Instructor: Lane, Thomas J
Description: Fundamentals of wheel-thrown and hand-built ceramics as forms of creative expression. Introduction to clay, glazes, and firing techniques.

ArtS 1904 Freshman Seminar: Artistic Interpretation of Genocide Testimony
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Feinberg, David L
Description: Student may contact the instructor or department for information.

ArtS 1905 Freshman Seminar: Inspiring Visual Wonder
A-F only, 3 credit(s);
Instructor: Katsiaficas, Diane
Description: In this seminar, students will engage in an investigation of `visual wonder` from an artist`s point of view. We will examine the projects to which humans have devoted themselves: the creation of illusion, the mastering of the impossible, to the comprehension of mystery. (Edward Rothstein, cultural critic-at-large for the New York Times) What visual works initiate marvel, surprise, pleasure, delight, conjecture and confusion? How do they reinvent the margins of experience? What are the strategies for working out visual ideas? What is the formal language we use to describe these efforts? How and why do we preserve and collect wonder? and throughout the seminar: we will attempt to create a few of our own visual wonders.
Style: 30% Discussion, 10% Small Group Activities, 30% Student Presentation, 10% Demonstration, 10% Field Trips, 10% Guest Speakers.
Grading: 20% reports/papers, 25% special projects, 20% journal, 35% class participation.

ArtS 1905 Freshman Seminar: The Art of Collaboration
A-F only, 3 credit(s);
Instructor: Sommers, Michael J
Description: This introductory seminar presents the characteristics and challenges of collaboration through three representative approaches drawn from visual arts, music, and theater. The course unfolds around concrete problematic situations arising from a collaborative and multimedia-enhanced project.

ArtS 2101 Drawing
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1101; Meets CLE req of Arts/Humanities
Instructor: Lyon, Joyce
Description: Student may contact the instructor or department for information.

ArtS 2101 Drawing
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1101; Meets CLE req of Arts/Humanities
Instructor: Morgan, Clarence E.
Description: Student may contact the instructor or department for information.

ArtS 2301 Sculpture
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1301; Meets CLE req of Arts/Humanities
Instructor: Rose, Thomas Albert  
Description: Student may contact the instructor or department for information.

ArtS 2502 Printmaking: Relief, Screen, Digital Processes  
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1502; Meets CLE req of Arts/Humanities  
Instructor: Schmid, Jenny  
Description: Student may contact the instructor or department for information.

ArtS 2701 Photography  
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1701; Meets CLE req of Arts/Humanities  
Instructor: Henkel, James V  
Description: THIS IS A TRADITIONAL DARK-ROOM COURSE And Requires a Film Style Camera in Good Working Order  
Introductory level course Intended or declared art major or minor; meets Lib Ed req of Arts/Humanities (was Other Humanities))  
Description: Course presents conceptual, technical, and historical aspects of photography within a fine arts context. Emphasis is on the creative process through hands-on experience and use of camera, film development, enlarging, and printing. Student needs a 35mm, single lens reflex film camera. Class Time: 25% Lecture, 25% Discussion, 50% Laboratory. Work Load: 1 exam, students should expect to attend approximately 4 hours of open lab sessions in order to complete their work to a satisfactory level. Grade: 15% mid exam, 30% final exam, 20% in-class presentation, 25% laboratory evaluation, 10% problem solving. Exam Format: performance  

ArtS 2702 Digital Photography  
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1703; Meets CLE req of Arts/Humanities  
Instructor: Shambroom, Paul Dennis  
Description: This introductory level class is specifically for declared (or soon to be declared) Art Major or Minor students. All ranges of photographic experience are welcome, from complete beginner to those already familiar with cameras and software. Photography is a means of understanding and interacting with both the world and the inner self. This is an art class first, not just a technology class. It is not simply "Photoshop Basics" or "How to Use your Digital Camera", although those things will be covered. We will emphasize a balance of technical skills, exploration of personal vision, and development of critical thinking and vocabulary relating to photography. We will examine the changing role of digital image production and distribution in society. Our own image making will be considered in the context of photographic history, visual literacy, and the universe of imagery in which we live. Projects will be completed with manually-controlled advanced digital cameras as well as cell phone cameras, and found images. Whether students continue with digital or move to traditional photographic methods after this class, the conceptual and technical fundamentals introduced here will apply. Class activities will consist of lectures and demonstrations, individual and group exercises, lab time, and visiting artists and field trips. The core of this class is a series of photographic assignments. While some will have a technical basis, all work should be approached in the service of creative expression and exploration. Students' work will be constructively discussed in class and small group critique sessions. Students will learn the basics of advanced digital camera operation. You will learn to make informed photographic choices over composition, moment, light, and subject. Students will master hardware and software tools, and learn color management and workflow principles. We will cover refined digital capture, image adjustment/manipulation and inkjet printing methods using Photoshop and Adobe Camera Raw. We will produce both print and screen-based projects. We will have a range of prior experience within our class, students will share their particular expertise through presentations, research and informal teamwork. Class readings and discussions will address digital photography issues such as: privacy, veracity, democracy, and authorship. You will become conversant in the history and contemporary practice of photography, and will develop critical thought and language for discussing and evaluating your own (and others') photographs. The written assignments consist of a research paper and presentation, as well as response papers to readings, gallery field trips and class visitors.

ArtS 2801 Ceramics  
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1801; Meets CLE req of Arts/Humanities  
Instructor: Pharis, Mark W  
Description: Student may contact the instructor or department for information.

ArtS 3101 Intermediate Drawing  
4 credit(s);  
Instructor: Sugnet, Anne Elizabeth  
Description: Student may contact the instructor or department for information.
ArtS 3102 Intermediate Painting
4 credit(s);
Instructor: Kuhr,Alexis
Description: Student may contact the instructor or department for information.

ArtS 3102 Intermediate Painting
4 credit(s);
Instructor: Lyon,Joyce
Description: Student may contact the instructor or department for information.

ArtS 3102 Intermediate Painting
4 credit(s);
Instructor: Feinberg,David L
Description: Student may contact the instructor or department for information.

ArtS 3107 Drawing Using Digital Media as an Essential Tool
4 credit(s);
Instructor: Katsiaficas,Diane
Description: Drawing using digital media as an essential tool. In this course, we will explore the possibilities of digital technology as an essential tool and component in contemporary drawing. Frameworks for projects will be proposed. These will be concept based with a focus on history and place. The purpose is that proposed projects guide an investigation of representation and aesthetic discourse and help expand both the content and context of your present work. Our approach will be mixed media, utilizing the digital technology available as art making tools and as an important component will be used to expand upon "handmade" images that are already part of your repertoire in past works. To 'draw' on digital works with other media using the skill and expression of an artist (painters, sculptors, etc. etc.) To explore the variations of 'what if?' that are so easily afforded by digital techniques? Our discussion in critique will focus on developing an "open set" of concerns, examining the means of representation (WHY and HOW DID you do that?) as well as the meaning, interpretation and ethics of images (How do we RESPOND?). The emphasis will be on examining substance as well as the production of images. Your output should be appropriate to the idea and the images that result: from posting your work digitally to printing onto a variety of surfaces (rag paper, poly films, vinyl, transparent plastics, canvas, fabric). There will be six class projects. Each project will be reviewed, critiqued and graded. These projects are 70% of your grade. Classroom participation 15%. Attendance 15%. Class Time: 30% Discussion, 50% Laboratory. demos; 10% artist presentations/field trips (Weisman/ Walker Art Center Library/ MCBA)

ArtS 3111 Life Drawing I
4 credit(s);
Instructor: Bussey,Margaret Barten
Description: Focus on the human form with an introduction to anatomy. Exploration of various concepts of representation and methods of image construction. Work from life models, anatomical casts, skeleton, memory and imagination.

ArtS 3300 Intermediate Sculpture
4 credit(s);
Instructor: Rose,Thomas Albert
Description: Student may contact the instructor or department for information.

ArtS 3390 Sculpture Methods and Practice: Metal Construction/Modeling/Rapid Prototype
4 credit(s), max credits 12, 3 completions allowed;1001 or 1301 or 2301Credit will not be granted if credit has been received for: ARTS 5390;
Instructor: Larson,Chris
Description: This advanced sculpture course provides an opportunity for students to develop their own direction and voice in their studio practice. Students are encouraged to explore different medias, methods and practice. No one media or way of working is favored over the other. Regular working critiques, discussions, museum and gallery visits, readings and videos compliment studio work. Metal Construction and Laser technical seminars will be conducted over the course of the semester. A rigorous studio practice is expected.
Style: 5% Lecture, 50% Laboratory, 5% Field Trips, 40% Studio.
Grading: 20% mid exam, 20% final exam, 10% attendance, 10% in-class presentation, 20% class participation, 20% laboratory evaluation.

ArtS 3390 Sculpture Methods and Practice: Bronze and Iron Casting
4 credit(s), max credits 12, 3 completions allowed;1001 or 1301 or 2301Credit will not be granted if credit has been received for: ARTS 5390;
Instructor: Potratz, Wayne E
Description: Student may contact the instructor or department for information.

**ArtS 3390 Sculpture Methods and Practice: Installation and Public Sculpture**
4 credit(s), max credits 12, 3 completions allowed; 1001 or 1301 or 2301
Credit will not be granted if credit has been received for: ARTS 5390;
Instructor: Stanislav, Andrea
Description: Student may contact the instructor or department for information.

**ArtS 3444 Major Project**
S-N only, 1 credit(s);
Instructor: STAFF
Description: The major project in Art is intended to be a "capstone" experience for the senior majoring in Art. It is a required course for graduation with a major in art. All BA students majoring in art will participate in a group exhibition in the Regis Center Public Spaces scheduled near the end of the graduating semester. The student can include work in any format, from previous or current courses or independent studies, that they consider representative of their best work. The minimum experience (1 credit) involves participation in a series of meetings with the DUS at pre-announced times. At these meetings, students develop professional skills (preparation of resume, artist's statement, exhibition protocols, etc). Students also attend a variety of departmental presentations, visiting artist lectures, exhibitions. A second option is for students who want to self-design a project (1-3 credits) with an individual, regular faculty member. Through the self-designed project, students are encouraged to clarify their own visual concepts. For the individually designed experience, students must complete the Major Project Proposal Contract available from the Art Advising Office, E223 Regis Center.

**ArtS 3490 Workshop in Art: Graphics Revolution**
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Schmid, Jenny
Description: This class expands on traditional ideas of printmaking to embrace the digital original, which has many potential outputs, from t-shirts to manual fine art prints to animation. Students will build a foundation in theory and develop a body of work and experiment with technologies from all eras to find many manifestations of their ideas. There will be practical demonstrations on how to integrate old and new print technologies. We will discuss the present state of graphic arts and the relationship of printmaking to its closest cousins: animation, comics, commercial and revolutionary applications.

**ArtS 3490 Workshop in Art: Digital Toolbox for the Artist**
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Schwartzman, Robin Nicole
Description: This course will teach students the fundamental tools of Adobe Photoshop and Illustrator with emphasis on practical applications in the arts. Focus will be placed on the manipulation and creation of a wide variety of digital imagery. Skills developed in this course will be relevant to working in many areas including Photography, Drawing and Painting, Printmaking, and 2D and 3D Digital Fabrication. Additional emphasis will be placed on the creation of a digital portfolio and branding oneself as an artist. This course is for students who are already in the arts or for students interested in taking an art class who want to learn Photoshop and Illustrator at the basic and intermediate level. No previous experience necessary.

**ArtS 3496 Internship in the Arts**
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: The internship requirement for students in the BFA Art program may be satisfied through field work at local, regional or national arts organizations or with professional artists. BFA candidates gain experience in activities or in the administration of art or art-based organizations. Student and host organization or artists file a mutual contract approved by the student's BFA Faculty Mentor prior to registration; student and host provide written evaluation of the internship experience at the end of the specified experience.

**ArtS 3499 Internship at Katherine E. Nash Gallery**
S-N only, 3 credit(s);
Instructor: Oransky, Howard Lee
Description: Description of the Internship Welcome to the Internship Experience at the Katherine E. Nash Gallery. The internship is in three parts: Katherine E. Nash Gallery Installation/De-installation This internship includes an orientation to gallery work, installation, and de-installation of 3 exhibitions throughout the semester. An average of 20 hours should be spent per exhibition doing hands-on work. You should plan on working a total of 80-100 hours during the internship. Check the schedule for required hours. Managerial and assorted additional tasks: assisting in shipping and receiving needs, assisting in public relations, staffing receptions & gallery preparation needs. o We all work together as a team to transform the Nash gallery. o You are always, every time, no matter how small, encouraged to ask questions. o We will talk and work together to determine the best method and practices for installing each unique.
and individual piece of artwork. Upon completion of the course you will be on your way to running your own gallery in the future! Regis Center for Art Public Spaces The internship includes assisting with the installation and de-installation of at least one exhibition scheduled for Regis public spaces. Research Project The internship includes an independent field research project in which you will compare the Katherine E. Nash Gallery with four art exhibition spaces and their approaches to presenting art.

**Style:** 15% Demonstration, 5% Field Trips, 80% Service Learning. Orientation Friday, January 27, 2012 9:00 am - 12:00 pm Meet in the Department of Art Office in the Regis Center at 9:00 am

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**ArtS 3510 Intermediate Printmaking: Traditional and Contemporary Approaches**

- 4 credit(s), max credits 8;
- **Instructor:** Overturf, Edie
- **Description:** Student may contact the instructor or department for information.

**ArtS 3603 Experimental Video**

- 4 credit(s);
- **Instructor:** Olson, Marisa Suzanne
- **Description:** Student may contact the instructor or department for information.

**ArtS 3604 Animation**

- 4 credit(s);
- **Instructor:** Paul, Steve
- **Description:** Student may contact the instructor or department for information.

**ArtS 3701 Photography: Silver Processes**

- 4 credit(s);
- **Instructor:** Henkel, James V
- **Description:** This course is a dark-room intensive class. The course is designed to involve the student in issues relating to photography as a descriptive art making tool. Students will be expected to apply some testing of materials and darkroom techniques to a variety of assignments which are designed to explore thematic topics traditional to photographic practice in a contemporary and innovative way. A large percentage of this class involves the mastery of craft and skill based approaches to traditional black and white photographic materials as well as some experimental approaches to the dark-room. In addition to the use of 35mm cameras we will learn to use 4x5 view cameras and experiment with hand-made and vintage cameras. A historical overview as well as contemporary approaches will be presented. A 35 mm single lens reflex or larger format film style film camera is necessary for this class.

**ArtS 3702 Photography: The Extended Image**

- 4 credit(s);
- **Instructor:** Millikan, Jeffrey B
- **Description:** Student may contact the instructor or department for information.

**ArtS 3801 Ceramics: Wheel Throwing**

- 4 credit(s), max credits 8;
- **Instructor:** Hargens, Ursula Snow
- **Description:** Student may contact the instructor or department for information.

**ArtS 3802 Ceramics: Handbuilding**

- 4 credit(s), max credits 8;
- **Instructor:** Lane, Thomas J
- **Description:** Student may contact the instructor or department for information.

**ArtS 5107 Advanced Drawing Using Digital Media**

- 4 credit(s);
- **Instructor:** Katsiaficas, Diane
- **Description:** Description: Drawing using digital media as an essential tool. In this course, we will explore the possibilities of digital technology as an essential tool and component in contemporary drawing. Frameworks for projects will be proposed. These will be concept based with a focus on history and place. The purpose is that proposed projects guide an investigation of representation and aesthetic discourse and help expand both the content and context of your present work. Our approach will be mixed media, utilizing the digital technology available as art making tools and as an important component will be used to expand upon "handmade" images that are already part of your repertoire in past works. To 'draw' on digital works with other media using the skill and expression of an artist (painters, sculptors, etc. etc.) To explore the variations of 'what if?' that are so easily afforded by digital techniques? Our
discussion in critique will focus on developing an "open set" of concerns, examining the means of representation (WHY and HOW DID you do that?) as well as the meaning, interpretation and ethics of images (How do we RESPOND?). The emphasis will be on examining substance as well as the production of images. Your output should be appropriate to the idea and the images that result:

There will be six class projects. Each project will be reviewed, critiqued and graded. These projects are 70% of your grade. Classroom participation 15%. Attendance 15%. Class Time: 30% Discussion, 50% Laboratory. demos; 10% artist presentations/field trips (Weisman/ Walker Art Center Library/ MCBA)

ArtS 5110 Advanced Drawing
4 credit(s), max credits 12, 4 completions allowed;
Instructor: Baeumler, Christine Arle
Description: Student may contact the instructor or department for information.

ArtS 5110 Advanced Drawing
4 credit(s), max credits 12, 4 completions allowed;
Instructor: Gray, Lynn Arlyn
Description: Student may contact the instructor or department for information.

ArtS 5120 Advanced Painting
4 credit(s), max credits 12, 4 completions allowed;
Instructor: Morgan, Clarence E.
Description: As a studio course, students are provided challenging, individual critical feedback and participate in-group critiques focused on their work. The course is designed to confront the more complex problems facing the student artist today who already has a solid grasp of technique, materials and methods of painting. Similarly, ArtS 5120, is structured for students who have a need to solve the difficult, yet intriguing challenge of developing a personal visual language through the activity of painting. Emphasis will be placed on critical thinking, self-analysis, and the independent pursuit of ideas. During the semester student will focus on the clarification of their ideas as well as commitment and responsibility to those ideas. The goal is to independently develop a methodology that provides each student with the ability to creatively problem-solve. Likewise, an essential aspect of the creative process and creative personal development is experimentation. Thus, students are encouraged to experiment as they work toward developing a personal visual language.

Style: 10% Discussion, 10% Student Presentation, 80% Studio. The primary goal of Arts 5120 is the production/creation of a cohesive body of work. The aim is for each student to arrive at a place where forms, process, and materials are being responded to with commitment, vigor and genuineness. This studio expe

Grading: 25% final exam, 60% attendance, 15% in-class presentation. Grading will be based on a combination of discussion, lecture, readings, individual/group critiques, field trips, viewing DVDs, and studio work. Individual and group consultation of studio work provides intermittent feedback designed to encourage dia

Exam Format: Individual Final critiques scheduled with instructor

ArtS 5390 Advanced Sculpture Methods and Practice: Metal Construction/Modeling/Rapid Prototype
4 credit(s), max credits 12, 3 completions allowed; 5300 Credit will not be granted if credit has been received for: ARTS 3390;
Instructor: Larson, Chris
Description: This advanced sculpture course provides an opportunity for students to develop their own direction and voice in their studio practice. Students are encouraged to explore different medias, methods and practice. No one media or way of working is favored over the other. Regular working critiques, discussions, museum and gallery visits, readings and videos compliment studio work. Metal Construction and Laser technical seminars will be conducted over the course of the semester. A rigorous studio practice is expected.

Style: 5% Lecture, 50% Laboratory, 5% Field Trips, 40% Studio.
Grading: 20% mid exam, 20% final exam, 10% attendance, 10% in-class presentation, 20% class participation, 20% laboratory evaluation.

ArtS 5390 Advanced Sculpture Methods and Practice: Bronze and Iron Casting
4 credit(s), max credits 12, 3 completions allowed; 5300 Credit will not be granted if credit has been received for: ARTS 3390;
Instructor: Potratz, Wayne E
Description: Student may contact the instructor or department for information.

ArtS 5390 Advanced Sculpture Methods and Practice: Installation and Public Sculpture
4 credit(s), max credits 12, 3 completions allowed; 5300 Credit will not be granted if credit has been received for: ARTS 3390;
Instructor: Stanislav, Andrea
Description: Student may contact the instructor or department for information.
ArtS 5400 Seminar: Concepts and Practices in Art
3 credit(s), max credits 6;
Instructor: Schmid, Christina Heidi
Description: Student may contact the instructor or department for information.

ArtS 5444 Bachelor of Fine Arts Exhibition
S-N only, 1 credit(s);
Instructor: Yamada, Tetsuya
Description: Student may contact the instructor or department for information.

ArtS 5490 Workshop in Art
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Schmid, Christina Heidi
Description: Student may contact the instructor or department for information.

ArtS 5490 Workshop in Art: Graphics Revolution
4 credit(s), max credits 12, 12 completions allowed;
Instructor: Schmid, Jenny
Description: Student may contact the instructor or department for information.

ArtS 5490 Workshop in Art
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Schwartzman, Robin Nicole
Description: This course will teach students the fundamental tools of Adobe Photoshop and Illustrator with emphasis on practical applications in the arts. Focus will be placed on the manipulation and creation of a wide variety of digital imagery. Skills developed in this course will be relevant to working in many areas including Photography, Drawing and Painting, Printmaking, and 2D and 3D Digital Fabrication. Additional emphasis will be placed on the creation of a digital portfolio and branding oneself as an artist. This course is for students who are already in the arts or for students interested in taking an art class who want to learn Photoshop and Illustrator at the basic and intermediate level. No previous experience necessary.

ArtS 5490 Workshop in Art: Creativity in the Arts: Philosophical Perspectives
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Huovinen, Erkki Simeon
Description: How do people recognize creativity? How, if at all, does creativity in the arts differ from scientific creativity or from creativity in everyday life? What is the relationship between our psychological sense of novelty and absolute historical novelty? Does creativity always incorporate improvisation? How can we understand something that is truly new and original? Is creativity madness? Is it dangerous? Is it possible to teach creativity? Why is creativity valued? How can it be studied? These kinds of questions have occupied generations of artists, philosophers, psychologists, scientists and educators, and there are no self-evident answers to any of them. Nevertheless, our thinking about artistic creativity can reveal a lot about how we understand art's relation to social life, emotion and cognition, human agency, science, religion, and human nature in general. This course aims at strengthening students' understanding of their own artistic creativity and the role of creativity in the art world by examining philosophical and psychological accounts of creativity, both classical and contemporary. By studying and discussing a readings in philosophy, psychology, as well as practitioners' own writings in various art forms, the students will learn about the many fascinating roles that creativity has played in western thought. By studying examples of empirical work in the study of artistic creativity, they will gain a better sense of the relationships between aspects of creativity that are open to discursive scrutiny and ones that remain subjective - perhaps even spiritual - in nature. At the same time, the students will learn to better discuss their own creativity and find theoretical reference points that will help them mature as self-conscious, creative artists.
Style: 25% Lecture, 5% Film/Video, 40% Discussion, 10% Small Group Activities, 15% Student Presentation, 5% Field Trips.
Grading: 20% final exam, 20% reports/papers, 5% special projects, 10% reflection paper, 15% in-class presentation, 30% class participation.

ArtS 5510 Advanced Printmaking
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Kreps, Jerald A
Description: Student may contact the instructor or department for information.

ArtS 5630 Advanced Experimental Video
4 credit(s), max credits 12, 3 completions allowed;
ArtS 5640 Advanced Animation
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Paul, Steve
Description: Student may contact the instructor or department for information.

ArtS 5710 Advanced Photography
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Shambroom, Paul Dennis
Description: The core of this course is the development of a fully-formed body of work in a refined presentation format. The broader goal, however, is for students to embrace their art-making as a way to engage their inner selves and the world at large! All types of photographic (or mixed) media are encouraged. The common goal for each student this semester is to conceive of and complete one brilliant, astounding extended project, and use it to learn (and teach the rest of us) something about yourself and the world. You will write a short artist statement to accompany your final project, with help on working drafts throughout the semester. Technical topics will be covered as needed, demos determined by the class may include advanced lighting, Photoshop techniques, large format camera use, advanced silver printing, social networks, etc. Students will begin by identifying areas of passion and curiosity that lend themselves to exploration through an extended project. We will start by looking at previous work, then draw from aspects of your artistic, intellectual and emotional lives. This class relies heavily on student interaction in crits, brainstorming sessions and discussions. You will all be helping each other conceive of and guide your projects. There will be three work-in-progress crits in addition to the final crit. We will have a working artist or curator from the community to help conduct one of the crits. Each student will select a shared reading for the class, prepare questions and lead a discussion. The reading can be fiction or non-fiction, anything that informs your work and sensibilities. These will NOT be art theory or history readings, rather readings that are engaged with the non-art world outside school and museums.

ArtS 5810 Advanced Ceramics
4 credit(s), max credits 12, 4 completions allowed;
Instructor: Pharis, Mark W
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Pharis, Mark W
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Lyon, Joyce
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Lukkas, Lynn Tjernan
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Larson, Chris
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Baeumler, Christine Arle
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Feinberg, David L
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Morgan, Clarence E.
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Katsiaficas, Diane
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Henkel, James V
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Rose, Thomas Albert
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Lane, Thomas J
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Gray, Lynn Arlyn
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Potratz, Wayne E
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Krepps, Jerald A
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Kuhr, Alexis
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Yamada, Tetsuya
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Stanislav, Andrea
Description: Students will produce self directed projects with consent of instructor. Study will also focus on critical theory and the articulation of those ideas through studio production.
University of Minnesota - Course Guide For Twin Cities Campus - Fall 2012

Style: 50% Discussion, 50% Studio.
Exam Format: critique

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Schmid,Jenny
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Shambroom,Paul Dennis
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Peterson,Lamar
Description: Student may contact the instructor or department for information.

ArtS 8400 Theoretical Constructions in Contemporary Art
3 credit(s), max credits 6;
Instructor: Bielak,Susannah
Description: Student may contact the instructor or department for information.

ArtS 8410 Studio Critique
A-F only, 3 credit(s), max credits 6;
Instructor: Olson,Marisa Suzanne
Description: Student may contact the instructor or department for information.

ArtS 8500 Printmaking: Theory and Practice
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Krepps,Jerald A
Description: Student may contact the instructor or department for information.

ArtS 8700 Photography: Theory and Practice
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Henkel,James V
Description: Student may contact the instructor or department for information.

ArtS 8800 Ceramics: Theory and Practice
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Pharis,Mark W
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Pharis,Mark W
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Lyon,Joyce
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Lukkas,Lynn Tjernan
Description: Student may contact the instructor or department for information.
ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Larson, Chris
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Baeumler, Christine Arle
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Feinberg, David L
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Morgan, Clarence E.
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Katsiaficas, Diane
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Henkel, James V
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Rose, Thomas Albert
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Lane, Thomas J
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Gray, Lynn Arlyn
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Potratz, Wayne E
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Krepps, Jerald A
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Kuhr,Alexis
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Estep,Jan
Description: Independent study directed toward the graduate MFA thesis project. Generally restricted to graduate students in the Department of Art's MFA program in their third and final year of study. Please contact instructor for permission to register for this course.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Yamada,Tetsuya
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Willow,Diane
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Stanislav,Andrea
Description: Students develop and realize self-directed projects towards their MFA Thesis. There is a focus on critical discourse and learning to articulate one's ideas through dialogue, writing, and studio production.
Style: 50% Discussion, 50% Studio.
Grading: 50% mid exam, 50% final exam.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Schmid,Jenny
Description: Student may contact the instructor or department for information.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Shambroom,Paul Dennis
Description: Student may contact the instructor or department for information.

Art History 338 Heller Hall

ArtH 1001 Introduction to Art History: Prehistoric to Contemporary
3 credit(s);Meets CLE req of Arts/Humanities
Instructor: Eliason,Lois Munemitsu
Description: This course surveys major monuments and trends in the history of art from the prehistoric to the present time periods. By focusing on works from select western cultures and time periods, students will gain an understanding of the discipline of art history as well as the importance of art as a cultural artifact that reveals a given society's collective conscience and value systems. In addition to the study of style, subject matter, and patronage of works of art, this class will be devoted to reconstructing artworks' original setting, which includes attention to religious, political, and social contexts and influences. A study of core value systems that transcend time and place will be illustrated by comparing canonical works of art from the western survey with imagery and trends from our contemporary visual culture.

ArtH 1002W Why Art Matters
4 credit(s);Meets CLE req of Writing Intensive
Instructor: Chisholm,Anna
Description: Student may contact the instructor or department for information.
4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Myers, Ceri  
Description: Student may contact the instructor or department for information.

ArtH 1921W Introduction to Film Study  
4 credit(s); Credit will not be granted if credit has been received for: CSCL 1921W; Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive  
Instructor: Silberman, Robert B  
Description: This course provides an introduction to the fundamentals of film analysis and media study. Readings and lectures cover the technical, economic, social, and cultural aspects of film, from how the film industry and studios work to how films are marketed in the mass media and exhibited. Primary emphasis is on feature-length narrative fiction films, but attention is also paid to documentaries, animation, avant-garde and experimental film and video, television (news, sit-coms, soaps, sports, MTV, etc.), and New Media. The lectures and discussions will consider the relationship between the media and other areas of culture (politics, the music business, the mall world) and between film studies and other areas of knowledge (social history, literary study, art history, etc.). The history of film and media studies as a discipline is also considered. The course uses detailed analysis of a series of films, including Murnau's "Nosferatu," John Ford's "Stagecoach," Michael Curtiz's "Casablanca," Jean-Luc Godard's "Breathless," Ridley Scott's "Blade Runner," Spike Lee's "Do the Right Thing," and David Russell's "Three Kings," to develop an understanding of the basic concepts of film analysis and the basic elements of film production and distribution. These films also provide an ideal arena for exploring questions about the cinematic representation of ethnicity and race, gender roles, and the relationship between Hollywood and foreign film industries.  
Style: 50% Lecture, 30% Film/Video, 20% Discussion.  
Grading: 25% mid exam, 35% final exam, 40% reports/papers. Attendance (required) and participation in discussion sections, and the quality of brief written assignments (not graded A-F) can substantially affect the final grade.  
Exam Format: Exams include short answer (ID, definition + example, etc.) and take-home essays.

ArtH 3005 American Art  
4 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Marshall PhD, Jennifer Jane  
Description: This course is an introductory survey of artistic practice in the United States: from the colonial period (1600s) to the cold war (1960s). Slide-based lectures introduce students to masterpieces and little-known works of American painting, sculpture, and photography, and explore the many social-historical issues that inform art's role in American life: including, but not limited to, national identity, racial politics, gender relations, religious belief, and pop culture. Grading is based on in-class participation, 3 short research papers (2 pages each), and 2 in-class exams.  
Grading: 30% mid exam, 35% final exam, 30% reports/papers, 5% class participation.  
Exam Format: Slide ID, short-answer questions (e.g. key term definitions), and slide-based compare/contrast essays.

ArtH 3009 Medieval Art  
3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: STAFF  
Description: Medieval Art This course focuses on Medieval art in Western Europe, from around 1000 to the mid-14th century, a new world of magnificent churches, sculptures of monsters and saints, preciously illustrated books, magnificent gold and stone statues, stained glass windows, and ivory carvings. Works from France, Spain, Germany, Italy, and England will be examined in their historical context, with particular attention paid to cross cultural relations, the development of completely new forms of art, and techniques and the processes of realization.

ArtH 3009 Medieval Art  
3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Bartoli, Roberta  
Description: Medieval Art This course focuses on Medieval art in Western Europe, from around 1000 to the mid-14th century, a new world of magnificent churches, sculptures of monsters and saints, preciously illustrated books, magnificent gold and stone statues, stained glass windows, and ivory carvings. Works from France, Spain, Germany, Italy, and England will be examined in their historical context, with particular attention paid to cross cultural relations, the development of completely new forms of art, and techniques and the processes of realization.

ArtH 3012 19th and 20th Century Art  
3 credit(s);  
Instructor: Weisberg, Gabriel  
Description: Major monuments and issues of modern period: sculpture, architecture, painting, and prints. Movements include neoclassicism, romanticism, realism, impressionism, evolution of modernism, symbolism, fauvism, cubism, dadaism, surrealism, abstract
expressionism, pop art, conceptualism, and post-modernism. A term paper, based on a close reading and interpretation of a selected painting or sculpture in the MIA Collection will be required. Course Requirements: Mid-term, Final Exam and a Term Paper.

ArtH 3013 Introduction to East Asian Art
3 credit(s); Credit will not be granted if credit has been received for: EAS 3013;  
Instructor: Kim, Minku  
Description: Student may contact the instructor or department for information.

ArtH 3162 Roman Art and Archaeology
3 credit(s); Credit will not be granted if credit has been received for: CNES 3162; Meets CLE req of Historical Perspectives  
Instructor: Canepa PhD, Matthew P.  
Description: This course will provide an introduction to the history of Roman art and archaeology from the formation of the city-state of Rome under Etruscan domination, to the Roman Empire under Augustus, to the transformation of Roman visual culture in late antiquity as the Roman Empire became Christian under Constantine the Great. No background in the time period or discipline is expected and therefore this class will also serve as an introduction to interdisciplinary study of art history and the classical world. A number of art historical methodologies will be introduced in order to not only give the student a useful background in art history but to give him or her the tools to think as historians and incorporate related visual and textual evidence meaningfully into their writing.  
Style: 80% Lecture, 10% Discussion, 10% Field Trips.  
Grading: Two midterms and a final (25% each); short papers (20%); attendance (5%).  

ArtH 3309 Renaissance Art in Europe  
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Gaudio, Michael  
Description: This course focuses on the major artists and monuments of the Renaissance in Europe. Students will explore ways in which the making and viewing of art works was shaped by social and cultural contexts such as Renaissance Humanism, the Protestant Reformation, the Counter-Reformation, and the emergence of a market economy. Students also explore the relationships between artistic creation and other spheres of life in the Renaissance, including literature, science, and politics. The course teaches basic art-historical skills of analyzing and writing about works of art.

ArtH 3335 Baroque Rome: Art and Politics in the Papal Capital  
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335; Meets CLE req of Historical Perspectives  
Instructor: Ostrow, Steven F  
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

ArtH 3434 Art and the Environment  
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Environment  
Instructor: Blocker, Jane M  
Description: In this course we will examine the international movements loosely grouped under the names Land Art, Earth Art, and (more commonly today) Environmental Art. We will trace the historical development of these movements from 1968, when the first exhibition of such art, called "Earthworks," took place at the Dwan Gallery in New York, up to the present day. The course tracks the changing aesthetic, political, biological, economic, agricultural, technological, and climatic forces that influenced such art, from the anti-institutionalism and participatory approaches of the 1960s to the more activist artistic engagement with environmentalism and globalization today. The class takes up two primary concerns: understanding the historical and scientific conditions that have given rise to such art, and understanding the ways in which artists have sought to intervene in and affect a changing environment. Classes are structured around course readings, lectures, and discussions.  
Style: 40% Lecture, 40% Discussion, 10% Small Group Activities, 10% Student Presentation.  
Grading: 25% mid exam, 25% reports/papers, 40% special projects, 10% class participation.

ArtH 3930 Junior-Senior Seminar: The History of Collecting and Museums  
A-F only, 3 credit(s);  
Instructor: Weisberg, Gabriel  
Description: This seminar examines the role of collections and museums in a given society, studies various types of museums, and establishes the ways in which museums interact with a society and its community. What museums have done in the past ? care for collections or establish an on-going exhibition program ? provides the foundation for seeing what museums do within the context of the history of ideas. Considerable attention will be focused on the ways in which students can determine the nature of collections, and how learning about these collections are fostered by the museums. The reading of appropriate texts, such as Steven Conn's, MUSEUMS
AND AMERICAN INTELLECTUAL LIFE, 1876-1926 will provide the tools for students to consider larger issues. Through discussions with actual museum curators, who will be joining the course to explain their collections, and in researching a given museum, students will be better able to address the larger intellectual issues of the educational mission now and in the future of a given museum.

ArtH 3940 Topics in Art History: WAM APP:Creating App - Weisman
3 credit(s), max credits 4, 1 completion allowed;
Instructor: LeFevre, Camille Lynn
Description: Student may contact the instructor or department for information.

ArtH 3975 Directed Museum Experience
1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: STAFF
Description: The student is responsible for obtaining an internship in an art institution or museum which must be approved by the Director of Undergraduate Studies in Art History. For 2 credits the internship must be for at least 10 hours per week. S/N registration only. Open to majors and non-majors. Speak with the ArtH DUGS for more information.
Style: On-site internship.
Grading: Grade (S-N) recommended by intern supervisor.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Asher, Catherine B
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Weisberg, Gabriel
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Asher, Frederick M
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Silverman, Robert B
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Blocker, Jane M
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Gaudio, Michael
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Ostrow, Steven F
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Afanador-Pujo, Angelica J
Description: Student may contact the instructor or department for information.
ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Marshall PhD, Jennifer Jane
Description: Student may contact the instructor or department for information.

ArtH 3993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Canepa PhD, Matthew P.
Description: Student may contact the instructor or department for information.

ArtH 5323 Art of the Italian Renaissance: 14th-16th Centuries
3 credit(s);
Instructor: Bartoli, Roberta
Description: This course focuses on two crucial centuries in Italian art, from 1400 to 1600. Students will consider the aesthetic, social, and historical significance of paintings and sculptures from the Late Gothic period to the end of Mannerism. Students will also explore the visual revolution of humanism; the magnificence of princely courts; and the stylistic innovations of Michelangelo.

ArtH 5335 Baroque Rome: Art and Politics in the Papal Capital
3 credit(s); Credit will not be granted if credit has been received for: ARTH 3335;
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

ArtH 5466 Contemporary Art
3 credit(s);
Instructor: Blocker, Jane M
Description: Aimed at advanced undergraduates and graduate students, this course will survey the art and important critical literature of the last thirty-five years. Its goal is to examine the aesthetic and theoretical debates of this period, including such things as postmodernism, poststructuralism, new media, and theories of globalization. Its goal is to contextualize, both historically and theoretically, the present state of art production and reception. Students will be asked to read critical texts, participate in discussions, and write three take-home essay exams.
Style: 50% Lecture, 50% Discussion.
Grading: 90% reports/papers, 10% class participation.
Exam Format: There will be three take-home essay exams/papers.

ArtH 5577 Art of the Harlem Renaissance
3 credit(s);
Instructor: Marshall PhD, Jennifer Jane
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Asher, Catherine B
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Weisberg, Gabriel
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Asher, Frederick M
Description: Student may contact the instructor or department for information.
Instructor: Silberman, Robert B
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Blocker, Jane M
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Gaudio, Michael
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Ostrow, Steven F
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Afanador-Pujol, Angelica J
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Marshall PhD, Jennifer Jane
Description: Student may contact the instructor or department for information.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Canepa PhD, Matthew P.
Description: Student may contact the instructor or department for information.

ArtH 8190 Seminar: Issues in Ancient Art and Archaeology: Fire Temples and Sacred Spaces
3 credit(s), max credits 12, 4 completions allowed; instr consent Credit will not be granted if credit has been received for: CNES 8190;
Instructor: Canepa PhD, Matthew P.
Description: Topic for Fall 2012: Fire Temples and Sacred Spaces: Contesting Sacred Topographies, Architecture and Ritual in Persia and the Ancient Iranian World. This seminar explores the development, rupture and change in Iranian sacred space, topography, architecture, and royal ritual from the Median through the Sasanian eras (ca. 700 BCE-642 CE). As important subthemes, this seminar will 1) consider historiographical problems surrounding various scholarly constructions of a tradition of Iranian fire temple architecture, paying special attention to the continued influence of Nazi-era scholarship and 2) introduce select contemporary theoretical approaches to natural, architectonic, and ritual inscriptions of space. The seminar considers evidence of sacred space and architecture under the Achaemenid dynasty and appropriation of sacred sites in Egypt, Babylon and Anatolia. It will examine, in particular, the evidence (or lack thereof) for the Achaemenid fire temple. It then considers the impact of the Seleukid Empire on Iranian cultures and religions (broadly defined) and the subsequent emergence of new traditions of sacred architecture and cult under the Arsacids, Kushans, and Sasanians. In addition to considering the transformation of Iranian traditions, it investigates the impact of these new traditions on the Mediterranean and the lands in the interstices, such as Armenia, Pontos and Commagene, which selectively appropriated Greek, Mesopotamian, and Iranian traditions.

Arts and Cultural Leadership 20 Ruttan Hall

ACL 5220 Philanthropy, Development, and Strategic Leadership
A-F only, 3 credit(s);
Instructor: Trow, Tom
Description: Philanthropy, Development, and Strategic Leadership - Explore the variety of funding sources available to nonprofit organizations, and the strategies employed to acquire and sustain the necessary resources. Investigate and discuss the complexities and nuances of both earned and unearned income for nonprofits, the motives and perspectives of funders and donors,
the role of communications strategies in support of fundraising, and the importance of leadership in acquiring resources to sustain and grow a successful organization. Develop both a broad understanding of resources as well as detailed strategies for supporting nonprofit organizations. Participants will interact with leaders from the foundation and nonprofit community during most class sessions, including from the State Arts Board, St. Paul Foundation, TPT, Jerome Foundation, Bush Foundation, etc.

**ACL 8201 Mentorship/Project Leadership Practicum**
- A-F only, 1 credit(s), max credits 2;
- Instructor: Cuesta, Carlo M
- **Description:** Student may contact the instructor or department for information.

**ACL 8202 Arts and Cultural Nonprofit Board Practicum**
- A-F only, 1 credit(s), max credits 2;
- Instructor: Ober, Gayle Marie
- **Description:** Student may contact the instructor or department for information.

Asian American Studies

**AAS 1101 Imagining Asian America**
- 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
- Instructor: Karem Albrecht, Charlotte
- **Description:** Asian Americans are the fastest-growing minority population in the United States. Their histories, cultures, and experiences have become increasingly crucial to understanding contemporary American citizenship, identity, and values. We will look at past and present aspects of the diverse and multifaceted vision of "Asian America," using histories, films, memoirs, and other texts as illustrations. We will also study how the history of immigration, exclusion, and naturalization laws has visibly shaped existing Asian American communities and identities, and, how "Asian America" is central to a more general understanding of American popular culture and public life. This course satisfies LE Requirements for Cultural Diversity and Citizenship and Public Ethics. Readings include memoirs, historical and contemporary documents. We will view short documentaries and use other media. Class time will involve discussion and small group projects. Assignments will include short essays and a final project.
- **Grading:** 20% attendance, 80% other evaluation. 3 short essay, 3 pages (30%); 3 short quizzes (30%); Group curriculum project - oral and written presentation (20%).

**AAS 1902 Freshman Seminar: Asian American Experience**
- 3 credit(s); Meets CLE req of Diversity and Soc Justice US
- Instructor: Lee, Richard M
- **Description:** Student may contact the instructor or department for information.

**AAS 3001 Contemporary Perspectives on Asian America**
- 3 credit(s); Credit will not be granted if credit has been received for: AMST 3001; Meets CLE req of Diversity and Soc Justice US
- Instructor: Fajardo, Kale Bantigue
- **Description:** Where are Asian Americans located locally, regionally, nationally, and globally? Does geographic location make a difference in how Asian Americans understand and experience their identities and communities? How do different places and the politics in these places (for example, Asia, U.S. west coast, U.S. Midwest, New York, Hawaii, Caribbean) affect Asian/Asian American experiences, identities and communities? This course focuses on different sites in Asian America to better understand the complexity, beauty, and problems of Asian America. Key questions for the course include: How do Asians/Asian Americans in diverse geographic locations experience, historicize, politicize, visualize, and/or imagine themselves and their communities in the context of the U.S., Asian America, and beyond? Who, what, where, when, and how is Asian America? What are the cultural politics of space, place, and movement in Asian America? How do these issues play out in Minnesota/Twin Cities? Participants in this course will seriously explore and engage these questions and themes by reading theory, literature, film, and art and working on a group research project about an Asian American space, place, or movement in the Twin Cities.
- **Style:** 30% Lecture, 30% Film/Video, 40% Discussion.
- **Grading:** 40% reports/papers, 40% class participation, 20% other evaluation. Final Project

**AAS 3301 Asian America Through Arts and Culture**
- 3 credit(s); Credit will not be granted if credit has been received for: ENGL 3301; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
- Instructor: Lee, Josephine D
- **Description:** Through the analysis of theater, dance, music, visual arts, and other artistic practices, Asian American Through Arts and Culture increases awareness of the artistic contributions as well as the history, politics, and culture of Asian Americans. This term we
will focus on Asian American theater and drama, looking at plays by a range of modern and contemporary artists. Students will analyze, critique, and interpret these plays in light of the historical and social contexts in which they were produced, their creation and uses of aesthetic form, and their impact on individuals and communities. Discussion, writing assignments, and oral presentations will focus on different ways of encountering and evaluating drama; for instance, students will write critical analyses and production reviews. We will examine what it means to define artists and their work as being "Asian American" and explore how other categories of identity such as gender, sexuality, or class intersect with race. We will study how art works not only as individual creativity but also as communal and social practice; for instance, we look at the history of theaters, such as East-West Players or Pan Asian Repertory Theatre, that have sustained Asian Americans as actors, playwrights, and designers. The course has a service-learning option that allows students to work with the wealth of resources in local Asian American arts communities, with groups and organizations such as the Center for Hmong Arts and Talent, Mu Performing Arts, or Pangea World Theater. Students will be asked to attend local arts events.

Style: 20% Lecture, 80% Discussion.
Grading: 80% reports/papers, 10% attendance, 10% in-class presentation.

AAS 3483 Hmong History Across the Globe
3 credit(s);
Instructor: Lee, Mai Na M.
Description: Hmong relations with the Chinese state and mass exodus into Southeast Asia. Hmong history and society in the context of lowland Southeast Asian states and Western colonial powers from 1800 to 1975. The course concludes by critically analyzing the dramatic displacement of Hmong to the West after 1975 and their initial integration into American and other Western societies. Themes include: Hmong and early indigenous Southeast Asian states (pre-1893), French colonial rule (1893-1955), and Hmong entanglement with the US as special guerrilla soldiers in a "Secret War" (1960-75) and becoming refugees across the globe. Religious, social, political, and gender and ethnic identity transformations are central. Grades are based on two midterms, discussions/class assignments, short critical papers, newspaper report, term paper, and a final exam.

AAS 3920 Topics in Asian American Studies: Asian American Health and Research
3 credit(s), max credits 8;
Instructor: Kwon, Melissa
Description: This course provides intensive training in social science research methods within the context of Asian and Pacific Islander (API) women and public health. Students will learn about API women's health issues both locally and nationally. They will then apply this knowledge by actively researching a women's health topic that most affects the UCI campus community. Students will be required to work collaboratively to conduct community-based research and analyze and interpret data. Students are highly encouraged to continue on to the next sections of this course, in which students will conduct social action projects based upon the research findings obtained in this class. Students' personal experiences and perspectives will be critical in completing class assignments and fully participating in class. The full year long course will combine research, advocacy, and leadership development using the frameworks and principles of public health and social justice. Instructor: Dr. Melissa Kwon is a Research Associate for the Center for Applied Research and Educational Improvement in the College of Education and Human Development at the University of Minnesota, Twin Cities. Dr. Kwon earned both her MA in Education with an emphasis in Research Methodology and her PhD in Education with an emphasis in Cultural Perspectives and Comparative Education from the University of California, Santa Barbara (UCSB). She has taught various courses in the Departments of Asian American Studies and Education at UCSB, including Asian American Gender & Sexuality, Asian American Migrations since 1965, Asian American Literature, and Research on Teaching & Learning in Sociocultural Contexts. Her research focuses on Asian American college student experiences in higher education.

Asian Languages and Literatures 220 Folwell Hall

ALL 3001 Reading Asian Cultures
A-F only, 3 credit(s);
Instructor: Rouzer, Paul F
Description: Introduction to primary Asian texts in translation, with an emphasis on close reading skills and methodological rigor. Interpretative essays and articles by scholars in the field will also be introduced to some extent. Topic for Fall 2012: Buddhism and Asian culture. An examination of the impact of Buddhism on the cultures of South Asia, China, Tibet, Korea, and Japan as manifested in literature and film. Attention will be paid to both pre-modern texts and on modern forms of fiction and poetry as well as on contemporary cinema. There will be mandatory film showings approximately every other week.
Style: 60% Lecture, 40% Discussion.
Grading: 60% reports/papers, 30% quizzes, 10% class participation.

ALL 3361W Maps, Pictures, and Writing in the Representation of Taiwan
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Allen, Joseph R
ALL 3433W Traditional Japanese Literature in Translation
3 credit(s); meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Isaka, Maki
Description: This course examines diverse traditions of Japanese premodern literature. We will begin with traditions in the classical age—the realm of princes, princesses, poets, and the like. We will also pay attention to worlds that not only constitute the foundation of Japanese literature in one way or another, but also continue furnishing images of Japan today: these include samurai, drama, and the floating world of townspeople. No less importantly, we will also investigate their literary and theoretical continuity, or discontinuity, which we may observe today. Toward this end, we will explore several themes in relation to premodern Japanese literature: aesthetics, philosophy, gender, and so forth. This course also fulfills the Liberal Education requirements of "Literature" and "Writing Intensive." Writing, revising, and class workshops about writing will be an integral part of the class. This course is open to anyone with an interest. No previous knowledge of Japanese studies is required. No reading knowledge of Japanese is required; All of the readings will be available in English. Audio-visual materials will be used whenever available and appropriate.

ALL 3437 Modern Japan, Meiji to the Present (1868-2000)
3 credit(s); Credit will not be granted if credit has been received for: HIST 3471; Meets CLE req of Historical Perspectives
Instructor: Mizuno, Hiromi
Description: Student may contact the instructor or department for information.

ALL 3536 Modern Korean Literature
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Workman, Travis
Description: Student may contact the instructor or department for information.

ALL 3637W Modern South Asian Literature
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Sawhney, Simona
Description: The contemporary Hindi writer Uday Prakash has written a strange and haunting story about the first British Governor General of India, Warren Hastings (1732-1818) titled "Warren Hastings and His Bull." Presenting Hastings as an embodiment of the contradictory passions of colonial rule, Prakash evokes a fascinating picture of globalization in the eighteenth century. Beginning with that story, we will read a series of works by modern writers who have engaged with the political and emotional confusions of postcolonial life in South Asia. We will read about kings who write mournful poetry instead of marching to war, about women who eat obsessively to ward off despair, and destitute men who squander on liquor the money they should have spent on a relative's funeral. Through these stories and the films, historical accounts, and critical analyses that accompany them, we will learn about some of the partitions, political struggles, and intellectual debates that have marked modern South Asia. This course fulfills the Writing Intensive requirement. All readings in English.
Style: 50% Lecture, 50% Discussion.

ALL 3671 Hinduism
3 credit(s); Credit will not be granted if credit already received for: SALC 3412/SALC 5412; Credit will not be granted if credit has been received for: ALL 5671;
Instructor: Skaria, Ajay
Description: Although Hinduism is today almost universally recognized as one of the major religions of India, scholars generally agree that the term "Hinduism" itself is of rather late origin, and that it gathers together many varied texts, sects, and practices that for several centuries had been identified by a series of different names. This course has three objectives: first, to introduce students to some of the texts that are today considered essential to Hindu philosophical and spiritual traditions; second, to study some of the most powerful debates about the meaning and significance of Hindu texts in modern times; and third, to consider the ways in which Hindu identity today plays a crucial role in the political landscape of India. Our course will also include more wide-ranging discussions regarding the academic study of religious faith, the ways in which disciplines such as anthropology and history approach traditions of faith, and the changing force of religion in a largely secular world. All readings in English.
ALL 3676 Culture and Society of India
3 credit(s); Credit will not be granted if credit has been received for: ANTH 3023; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

ALL 3920 Topics in Asian Culture: Social Change in Modern China
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Wang, Leping
Description: Student may contact the instructor or department for information.

ALL 3920 Topics in Asian Culture: Bio-Japan
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Marran, Christine L
Description: ALL 3920 Bios-Japan: Environment and Culture in Modern Japan In this course, students will become familiar with modern perspectives on the environment in Japan. Students will read and view historical and literary texts in discovering the guiding ideas about nature, human culture, and animals in Japan’s development from a sequestered feudal nation to a 21st century power. Subjects will include: views of nature and evolution; insects in science and popular culture; whales and dolphins on the global stage; dogs and empire; toxins and industry; radiation in Japan, past and present; land reclamation; and the environmental turn in Japan. No prior knowledge of Japan is necessary. Ideas discussed in this course will be relevant to students interested in Japan as well as environmental students from other fields and disciplines. Responsibilities include: weekly reader response worksheets, presentation of a project on an environment or animal-related subject, midterm, final.
Style: 20% Lecture, 5% Film/Video, 30% Discussion, 20% Small Group Activities, 20% Student Presentation, 5% Guest Speakers.
Grading: 20% mid exam, 40% final exam, 20% written homework, 20% in-class presentation.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Allen, Joseph R
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Isaka, Maki
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Sawhney, Simona
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Rouzer, Paul F
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Workman, Travis
Description: Student may contact the instructor or department for information.
ALL 5261 Work of Translation: Theory, Function, and Practice  
3 credit(s);  
Instructor: Allen, Joseph R  
Description: This course is a review of the issues surrounding translation, including theories of representation, ideological work, as well as actual practice. The course is structured around a series of readings and discussion of both historical and contemporary writing on translation; Lawrence Venuti's Translation Studies Reader is the base text. While most of the readings center on the theory and particulars of literary translation, students will be encouraged to explore other manifestations of translation as a historical, cultural or aesthetic issue. Along with those interested in languages and literature, students in disciplines such as creative writing, performance, and the plastic arts are also welcomed. You should be native or near-native speaker of English, as well as an advanced speaker/reader of at least one other language, either classical or vernacular.

ALL 5436 Literature by 20th-Century Japanese Women in Translation  
3 credit(s);  
Instructor: Marran, Christine L  
Description: In this course, students will read and discuss the most important women writers in Japan's modern history. We will also read Japanese-American authors. The course especially focuses on the topics of vernacular fiction, self-narrative, gender in literary history, history in fiction, environmental writing, bilingualism, transculturalism, and translation. Classroom discussion of texts will be preceded by lectures, which will provide students with an understanding of the primary issues at stake for women in their lives and writing.  
Style: 50% Lecture, 20% Discussion, 20% Student Presentation, 10% Guest Speakers.  
Grading: 70% reports/papers, 30% written homework.

ALL 5920 Topics in Asian Culture: Bombay Social Film  
4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Ganguly, Keya  
Description: Student may contact the instructor or department for information.

ALL 5990 Directed Study  
1-4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Allen, Joseph R  
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Open to advanced students only. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations. Graduate students will be asked to do more independent reading and writing, beyond those assigned to undergraduate students.

ALL 5990 Directed Study  
1-4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Isaka, Maki  
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Open to advanced students only. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations. Graduate students will be asked to do more independent reading and writing, beyond those assigned to undergraduate students.

ALL 5990 Directed Study  
1-4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Sawhney, Simona  
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Open to advanced students only. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations. Graduate students will be asked to do more independent reading and writing, beyond those assigned to undergraduate students.

ALL 5990 Directed Study  
1-4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Rouzer, Paul F  
Description: Individual reading and study with guidance of a faculty member of topics not covered in regular courses. Open to advanced students only. Evaluation Standards and Workload: Variable, depending on course of study determined by the student and faculty. Generally students will be evaluated on written materials, exams, and presentations. Graduate students will be asked to do more independent reading and writing, beyond those assigned to undergraduate students.
ALL 5990 Directed Study
  1-4 credit(s), max credits 16, 4 completions allowed;
  Instructor: Workman, Travis
  Description: Student may contact the instructor or department for information.

ALL 8920 Topics in Asian culture: ALCM Seminar
  S-N only, 1 credit(s), max credits 9, 3 completions allowed;
  Instructor: Waltner, Ann Beth
  Description: Student may contact the instructor or department for information.

ALL 8990 Directed Readings
  1-4 credit(s), max credits 16, 4 completions allowed;
  Instructor: Allen, Joseph R
  Description: Student may contact the instructor or department for information.

ALL 8990 Directed Readings
  1-4 credit(s), max credits 16, 4 completions allowed;
  Instructor: Isaka, Maki
  Description: Student may contact the instructor or department for information.

ALL 8990 Directed Readings
  1-4 credit(s), max credits 16, 4 completions allowed;
  Instructor: Sawhney, Simona
  Description: Student may contact the instructor or department for information.

ALL 8990 Directed Readings
  1-4 credit(s), max credits 16, 4 completions allowed;
  Instructor: Rouzer, Paul F
  Description: Student may contact the instructor or department for information.

ALL 8990 Directed Readings
  1-4 credit(s), max credits 16, 4 completions allowed;
  Instructor: Workman, Travis
  Description: Student may contact the instructor or department for information.

Astronomy  356 Tate Laboratory of Physics

Ast 1001 Exploring the Universe
  4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences
  Instructor: Rudnick, Lawrence
  Description: This course is a scientific exploration of the human place in the universe. We study the origin and history of the Universe and the formation of the Earth and the solar system. We compare the Earth's properties with those of the other planets and explore how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior-high level mathematics. This course has both a lecture AND lab component. This course is intended for non-science majors; no science background is necessary. CSE students should take AST 1011H.
  Style: 45% Lecture, 15% Discussion, 40% Laboratory. Discussion time is during lecture.
  Grading: 27% mid exam, 25% final exam, 14% special projects, 10% class participation, 24% laboratory evaluation.
  Exam Format: Multiple-choice plus short answer.

Ast 1001 Exploring the Universe
  4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences
  Instructor: Jones, Terry J
  Description: This course is a scientific exploration of the human place in the universe. We study the origin and history of the University and the formation of the Earth and the solar system. We compare the Earth's properties with those of the other planets and explore
how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior-high level mathematics. Lectures are three days a week; on a 4th day each week two hours are spent in small groups working on a lab project. This course is intended for non-science majors; no science background is necessary. CSE students should take AST 1011H.

**Style:** 50% Lecture, 10% Discussion, 40% Laboratory.

**Grading:** 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.

**Exam Format:** Multiple choice, short answer, essay.

**Ast 1001 Exploring the Universe**

4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences

**Instructor:** McQuinn, Kristen Brookes W.

**Description:** Student may contact the instructor or department for information.

**Ast 1005 Descriptive Astronomy**

3 credit(s); non-science major Credit will not be granted if credit has been received for: AST 1001;

**Instructor:** Scarlata, Claudia Maria

**Description:** This course is a scientific exploration of the human place in the universe. We study the origin and history of the Universe and the formation of the Earth and the solar system. We compare the Earth’s properties with those of the other planets and explore how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior-high level mathematics. Lectures are three days a week; on a 4th day each week two hours are spent in small groups working on a lab project. This course is intended for non-science majors; no science background is necessary. CSE students should take Ast 1011H.

**Style:** 50% Lecture, 10% Discussion, 40% Laboratory.

**Grading:** 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.

**Exam Format:** A possible combination of multiple-choice, essay and/or short answer questions.

**Ast 1011H Exploring the Universe, Honors**

A-F only, 4 credit(s); High school trigonometry, [high school physics or chemistry] Credit will not be granted if credit has been received for: AST 1001; Meets CLE req of Environment; meets CLE req of Physical Sciences

**Instructor:** Woodward, Paul R

**Description:** This is the honors version (more mathematical) of AST 1001, which is our introductory course in Astronomy and Astrophysics. This course is a scientific exploration of the human place in the universe. We study the origin and history of the universe and the formation of the Earth and the solar system. We compare how the study of the heavens has influence human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior high level mathematics. This course has both a lecture AND lab component.

**Style:** 50% Lecture, 40% Laboratory.

**Grading:** 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.
Exam Format: A possible combination of multiple-choice, short-answer and/or essay questions.

Ast 1905 Freshman Seminar: Habitable Worlds, Exoplanets and Astrobiology
2 credit(s);
Instructor: Woodward, Charles E
Description: Habitable Worlds, Exoplanets and Astrobiology - This seminar will explore the new field of exoplanets detection and characterization and astrobiology focusing on which regions in the solar system may harbor life at present or may have supported life in the past and the potential requirements of the habitability zones in the exoplanetary systems. The necessary conditions for supporting life will also be discussed. We will also discuss the historical evolution of this emerging branch of astronomy, discuss the roles of the "citizen scientist" and review NASA missions designed to search for alien worlds. In addition to the required textbooks, other materials will also complement our exploration of this rapidly evolving science frontier. The materials is presented in a seminar format, wherein the instructor and the students share in the pedagogical process through discussions, readings, and presentations. My role as the instructor is that of a facilitator. Your role as a participant is to utilize the text, ancillary reading materials, multimedia presentations, class discussion, and web forum exchange as seeds for further exploration and inquiry.
Style: 40% Lecture, 45% Discussion. Other: 15%
Grading: 50% reports/papers, 15% special projects, 15% in-class presentation, 20% class participation.

Ast 1905 Freshman Seminar: Cosmic Catastrophes
2 credit(s);
Instructor: Woodward, Charles E
Description: This seminar will explore how the evolution of bodies in the solar system were affected by "cosmic impacts and other catastrophes," with special emphasis on how such events affected the biosphere of the Earth. We will discuss the history of the solar system, from its inception through the current epoch, and explore how comets, asteroids, and collisions between large and small objects "disturb" the solar system. We will focus attention on the nature of scientific discovery and debate by studying views on the great Cretaceous Extinction event. We shall explore how this scientific conversation led to deeper insight into the evolution of complex terrestrial bio-systems and our quest to identify which regions in the solar system may harbor life at present or may have supported life in the past. The necessary conditions for supporting life in the Universe will also be discussed. We will also explore the link between science and science fiction related to our fascination of cosmic impacts as seen through the eye of the media and popular culture. The material is presented in a seminar format, wherein the instructor and the students share in the pedagogical process through discussions, readings and presentations. My role as the instructor is that of a facilitator. Your role as a participant is to utilize the text, ancillary reading materials, multimedia presentations, class discussion, and web forum exchange as seeds for further exploration and inquiry. Your performance in the seminar will be evaluated on your weekly class attendance and participation, class group presentation, in-class response essays and an individual capstone paper.
Style: 40% Lecture, 45% Discussion. Other: 15%
Grading: 50% reports/papers, 15% special projects, 15% in-class presentation, 20% class participation.

Ast 2001 Introduction to Astrophysics
4 credit(s);
Instructor: Gehrz, Robert Douglas
Description: This is an introductory course for astronomy and astrophysics majors. You will be introduced to a broad range of topics in modern astrophysics, with an emphasis on how we measure astrophysical quantities and how we learn what these observations tell us about the physics of the universe. By the end of this class you will have a much greater facility with elementary theoretical calculations and making the kind of order of magnitude estimates that often guide work of scientists and engineers. The ultimate objective of the course is to give you the basic tools that you will need to read the current literature on astrophysics with a basic level of understanding.
Style: 50% Lecture, 20% Film/Video, 15% Discussion, 15% Demonstration.
Grading: 40% mid exam, 30% final exam, 30% problem solving.
Exam Format: Short answer and/or essay.

Ast 2990 Directed Studies
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: STAFF
Description: Independent, directed study in observational and theoretical astrophysics. Arrange with a faculty member.

Ast 4001 Astrophysics I
A-F only, 4 credit(s);
Instructor: Davidson, Kris
Description: Although it specifically concerns stars, this course covers material that is necessary for anyone who wishes to approach modern astrophysics at a semi-professional level - including extragalactic and cosmological problems. We explore the basic physics of stars, ranging from elementary concepts to phenomena that even the experts cannot yet explain. We also summarize real-life
spectroscopy and photometry which show which parts of theory work and which ones don’t.

**Style:** 95% Lecture, 5% Discussion.

**Grading:** 16% mid exam, 32% final exam, 45% written homework, 7% class participation.

**Exam Format:** Almost entirely short problems - similar to the homework but shorter. The final may also include one or two ultra-short-essay questions.

**Ast 4101 Computational Methods in the Physical Sciences**

4 credit(s);

**Instructor:** Jones, Thomas Walter

**Description:** Student may contact the instructor or department for information.

**Ast 4299H Senior Honors Astrophysics Research Seminar**

1 credit(s), max credits 2, 1 completion allowed;

**Instructor:** STAFF

**Description:** An honors opportunity for upper division astronomy and astrophysics majors in the honors program. Based on our departmental research. Students are expected to attend weekly department seminars where current research is described. They will be asked to write short reports 2/3 of the talks during the semester.

**Style:** 100% Lecture.

**Grading:** 100% reports/papers.

**Ast 4990 Directed Studies**

1-5 credit(s), max credits 5, 1 completion allowed;

**Instructor:** STAFF

**Description:** Independent, directed study in observational and theoretical astrophysics. Arrange with a faculty member.

**Ast 4994W Directed Research**

3-5 credit(s), max credits 5, 1 completion allowed; Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** Independent research in observational or theoretical astrophysics. Senior Thesis for undergraduate astrophysics majors. Arrange with faculty member.

**Ast 5022 Relativity, Cosmology, and the Universe**

4 credit(s); [2001, Phys 2601] or instr consent Credit will not be granted if credit has been received for: PHYS 5022;

**Instructor:** Williams, Liliya L R

**Description:** In this course, we will explore the evolution of the Universe from the beginning to the present day, and will cover the standard theory and observations as well as the latest developments in cosmology. Specific topics include: the global geometry and dynamics, inflation, baryogenesis, big bang nucleosynthesis, cosmic microwave background radiation, gravitational instability and structure formation. The course is intended for graduates and upper-level astronomy and physics undergraduates.

**Style:** 90% Lecture, 10% Discussion.

**Grading:** 20% mid exam, 25% final exam, 20% in-class presentation, 10% class participation, 25% problem solving.

**Exam Format:** Problems, some short answer questions.

**Ast 8200 Astrophysics Seminar**

1-3 credit(s), max credits 3, 1 completion allowed;

**Instructor:** Woodward, Charles E

**Description:** Student may contact the instructor or department for information.

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**Biochemistry 140 Gortner Lab of Biochemistry**

**BioC 1010 Human Health and Disease**

3 credit(s);

**Instructor:** Laporte, David C

**Description:** BioC 1010 provides an introduction to the molecular basis of common human diseases. Beginning with a description of the human genome, the course introduces the fundamental concepts of cellular and molecular biology, biochemical reactions, and the biochemical underpinnings of health and disease. Topics to be presented include Inherited Diseases (cystic fibrosis, hemophilia, sickle cell anemia, muscular dystrophy), Metabolic Diseases (diabetes, cardiovascular disease, hypertension, asthma, alcoholism), and Aging (osteoporosis, menopause, Alzheimer’s and other neurodegenerative diseases). Also included are the most common methods to diagnose, treat and prevent disease, including discussion of gene therapy, regenerative medicine (stem cells), and traditional drug-
based interventions. Several class periods will be devoted to discussions of case studies (patients with particular diseases). We will also discuss social impact of individual diseases. The goal of the course is to familiarize students with the molecular basis for different types of diseases and treatments. Student Learning Outcomes: Following successful completion of this course, each student should be capable of scholarly discussions of the following topics: the general principles of the biochemistry and the function of the various classes of biomolecules, chemical processes that occur in the human body, the molecular basis of diseases and their treatments, examples of the impact of biochemistry on today's society effectively communicate biochemical information in oral and written form. In addition, students should develop a sophisticated, portable biochemistry knowledge that they can use long after to course ends to: explain to their grandparents why their doctor recommends low dose aspirin explain to their parents how their cholesterol medication works evaluate information on a new artificial sweetener understand a new therapy for cystic fibrosis excel in upper level courses Student Expectations: As a student in this course, you are expected to take an active role in your learning. You are expected to attend every class, and to arrive on time and not leave early. You should be prepared for each lecture by reading the assigned material. You should take good lecture notes and use them to make sure you understand all of the concepts covered in class. You should ask questions in lecture to help clarify concepts. You should participate actively in the discussion sessions. You should adhere to the University of Minnesota Student Conduct Code found at http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html. Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% additional semester exams.

BioC 2011 Biochemistry for the Agricultural and Health Sciences
3 credit(s);
Instructor: Armitage, Ian MacLeod
Description: Purpose: To survey the fundamentals of chemistry and biochemistry as they apply to the organization, function and regulation of living systems, especially humans. Course Content: This course will review key elements of general chemistry and will introduce you to the disciplines of organic and biochemistry. Lectures in combination with readings in the textbooks will begin with components of general chemistry that are critical for an understanding of biochemistry. This will be followed by a review of organic chemistry principles and structures, again with a focus on material that is most important for an understanding of biochemistry. The last half of the course will be concerned with the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of chemical equilibria, enzyme catalysis, and bioenergetics; fundamental metabolic pathways; and the chemical nature of genetic information storage and transmission. The ultimate objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare you to comprehend the composition of living cells and their physiological processes at the molecular level. Required Textbook: Fundamentals of General, Organic & Biological Chemistry, 7th Edition, by McMurry/Castellion/Ballantine/Hoeger/Peterson Prentice-Education, Inc. 2007. This textbook is available for purchase at Books Underground, 7 Student Center, St. Paul campus and Coffman Memorial Union Bookstore, Minneapolis campus. Please check with instructor about the use of earlier additions. The text is also available on Amazon.com for a reduced price relative to the bookstore. Make sure to order the US edition which has ISBN-10: 0321750837. If you elect this route a new or used copy with or without the MasteringChemistry Access Card can be ordered. At the end of the semester the book can easily be sold back on Amazon.com for little net loss.
Style: 100% Lecture.
Grading: There are 4 exams and each exam is 25% of grade, totaling 100%

BioC 2331 Chemical Mechanisms in Biology
A-F only, 3 credit(s);
Instructor: Siliciano, Paul G
Description: Students in this course will learn organic structure, properties and chemical mechanism as they apply to biological systems. This theoretical approach is specifically designed to prepare students for subsequent courses in biochemistry. It will empower students to understand and even predict metabolic conversions, biodegradation and other biology-specific aspects of chemistry.
Style: 100% Lecture.
Grading: 60% mid exam, 20% final exam, 20% quizzes.
Exam Format: Short answer, write structures, solve problems, short essays

BioC 2331 Chemical Mechanisms in Biology
A-F only, 3 credit(s);
Instructor: Nelsestuen, Gary L
Description: Students in this course will learn organic structure, properties and chemical mechanism as they apply to biological systems. This theoretical approach is specifically designed to prepare students for subsequent courses in biochemistry. It will empower students to understand and even predict metabolic conversions, biodegradation and other biology-specific aspects of chemistry.
Style: 100% Lecture.
Grading: 60% mid exam, 20% final exam, 20% quizzes.
Exam Format: Short answer, write structures, solve problems, short essays

BioC 3021 Biochemistry
BioC 3021 Biochemistry
3 credit(s);[2331 or CHEM 2301, [BIOL 1002 or BIOL 1009 or BIOL 2003]] or instr consent Credit will not be granted if credit has been received for: BIOC 6021;
Instructor: Adolph,Kenneth W.
Description: This course is a one-semester survey of the fundamentals of biochemistry and is part of the core curriculum required for a Biology major in the College of Biological Sciences. The objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare the student to comprehend the composition of living cells and their physiological processes at the molecular level. Lectures consider the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of acid-base equilibria, enzyme catalysis and bioenergetics; fundamental metabolic pathways, and the chemical nature of genetic information storage and expression. The prerequisite reflects the strong emphasis on facility with organic chemistry. This course requires regular study effort on the part of the student. Students who plan to major in biochemistry should enroll in the alternate two-semester series, BioC 4331 and BioC 4332.
Style: 100% Lecture.
Grading: 75% mid exam, 25% final exam.
Exam Format: Short answer, write structures, multiple choice, solve problems, short essays

BioC 3021 Biochemistry
3 credit(s);[2331 or CHEM 2301, [BIOL 1002 or BIOL 1009 or BIOL 2003]] or instr consent Credit will not be granted if credit has been received for: BIOC 6021;
Instructor: Schottel,Janet L
Description: This course is a one-semester survey of the fundamentals of biochemistry and is part of the core curriculum required for a Biology major in the College of Biological Sciences. The objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare the student to comprehend the composition of living cells and their physiological processes at the molecular level. Lectures consider the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of acid-base equilibria, enzyme catalysis and bioenergetics; fundamental metabolic pathways, and the chemical nature of genetic information storage and expression. The prerequisite reflects the strong emphasis on facility with organic chemistry. This course requires regular study effort on the part of the student. Students who plan to major in biochemistry should enroll in the alternate two-semester series, BioC 4331 and BioC 4332.
Style: 100% Lecture.
Grading: 75% mid exam, 25% final exam.
Exam Format: Short answer, write structures, multiple choice, solve problems, short essays

BioC 3321 Biochemistry
A-F only, 3 credit(s);
Instructor: Scully,Steve
Description: Student may contact the instructor or department for information.

BioC 3960 Research Topics in Biochemistry
S-N only, 1 credit(s), max credits 2;
Instructor: Laporte,David C
Description: The goal of Research Topics in Biochemistry is to expose students to a wide variety of cutting-edge research projects. The course will begin with a two-lecture introduction covering how to read scientific papers and the basic concepts of experimental design and analysis. Faculty from the BMBB Department will then give a series of presentations on cutting edge research. Each faculty member will give two presentations. The first will be a broad overview of a research area and the second will focus on a specific paper, dissecting all or part of it in detail.
BioC 4025 Laboratory in Biochemistry
2 credit(s);
Instructor: Lange, Alex John
Description: Theory and practice of modern biochemical techniques including buffers and pH, protein (lactate dehydrogenase) purification, protein electrophoresis, enzyme characterization using kinetics and immunochemical methods, recombinant DNA techniques.
Style: 40% Lecture, 60% Laboratory.
Grading: 33% mid exam, 34% final exam, 33% quizzes.
Exam Format: Written and Problem solving

BioC 4125 Laboratory in Molecular Biology and Biotechnology
A-F only, 3 credit(s); [3021 or Biol 3021 or or Biol 4003], [4025 or GCD 4015 or GCD 4025 or MicB 3301] Credit will not be granted if credit has been received for: BIOL 4125;
Instructor: Das, Anath
Description: The course provides laboratory training in the methods commonly used in molecular biology laboratories in academia and industry. Techniques that will be learned include: cloning and analysis of DNA, DNA sequencing, DNA and protein sequence analysis using databases, PCR amplification of DNA, site-specific mutagenesis, and expression and analysis of recombinant proteins.
Style: 20% Lecture, 80% Laboratory.
Grading: 35% reports/papers, 50% quizzes, 15% laboratory evaluation.
Exam Format: Written and Problem solving

BioC 4331 Biochemistry I: Structure, Catalysis, and Metabolism in Biological Systems
4 credit(s);
Instructor: Murphy, Sharon Elizabeth
Description: Biochemistry I: structure, catalysis, metabolism in biological systems - The first 12 lectures review basic chemical concepts and then discuss primary structure (amino acids and sequence), secondary structure (helices, sheet turns), tertiary structure (folding, three dimensional structure) and quaternary structure (subunits and their interactions) of proteins. The next 14 lectures deal with enzyme kinetics and mechanisms and binding interactions. Protein purification and analysis are also discussed. The next 10 lectures discuss carbohydrates, lipid and membrane structures, transport processes. The final 16 lectures discuss metabolic pathways including, glycolysis, glycogen synthesis, the citric acid cycle, oxidative phosphorylation, amino acid and nitrogen metabolism, and lipid synthesis and metabolism. Thermodynamic considerations are emphasized for all pathways.
Style: 75% Lecture, 25% Discussion.
Grading: 30% mid exam, 30% final exam, 30% quizzes, 10% problem solving.
Exam Format: Combination of multiple choice, short answer and problem solving

BioC 4332 Biochemistry II: Molecular Mechanisms of Signal Transduction and Gene Expression
4 credit(s);
Instructor: Livingston, Dennis M
Description: BioC 4332 covers fundamental molecular biology and signal transduction. The course begins with the molecules and processes by which cells store, replicate, repair and express genetic information in the form of DNA, RNA and proteins. The latter part of the course describes regulatory processes that involve control of gene expression and mechanisms of signal transduction. The emphasis in the course is on the biochemical basis of gene function and biological regulatory processes. This course is designed for upper division undergraduates in the biological sciences, as well as beginning graduate students in other biological programs.
Style: 90% Lecture, 10% Discussion.
Grading: 75% mid exam, 25% final exam.
Exam Format: Exams will have both short answer (multiple choice, fill-in-the-blank) questions (approx 30-40%) and longer answer formats requiring you to explain and diagram concepts.

BioC 4521 Introduction to Physical Biochemistry
3 credit(s);
Instructor: Mayo, Kevin Henry
Description: The objective of this course is to introduce and develop the concepts of physical chemistry that are most important for biochemistry. Desired outcomes are for students to develop a basic understanding of how thermodynamics, kinetics, spectroscopy, and solution dynamics can be applied to biochemical problems, and to provide a background for those students who wish to pursue further study in physical biochemistry.
Style: 100% Lecture.
Grading: There are four exams, each worth 20%. In addition, 20% of the grade is determined by homeworks and class participation, including attendance.
Exam Format: problem solving

BioC 4793W Directed Studies: Writing Intensive
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Individual study on selected topics of problems. Emphasizes readings, use of scientific literature. Writing Intensive.

BioC 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Laboratory or field investigation of selected areas of research. Writing Intensive.

BioC 4993 Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: STAFF
Description: Individual study on selected topics or problems with emphasis on selected readings and use of scientific literature.

BioC 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: STAFF
Description: Laboratory or field investigation of selected areas of research.

BioC 5361 Microbial Genomics and Bioinformatics
3 credit(s);
Instructor: Wackett, Lawrence Philip
Description: This course is an introduction to genomics with an emphasis on developments in microbial genomics. The topics to be covered are sequencing methodologies, sequence analysis, genomics databases, genome mapping, prokaryotic horizontal gene transfer, genomics in biotechnology, and intellectual property issues in genomics.

BioC 5527 Introduction to Modern Structural Biology
4 credit(s);
Instructor: Aihara, Hideki
Description:

BioC 5531 Macromolecular Crystallography I: Fundamentals and Techniques
S-N only, 1 credit(s);
Instructor: Ohlendorf, Douglas Henry
Description: This discussion/seminar course is the first of a two-semester sequence on the topic of Macromolecular Crystallography, the technique by which the complete three-dimensional structure of molecules can be determined. Both courses can only be taken S/N, with grading based primarily upon participation. Where appropriate, classes go into the laboratory to examine the equipment and to observe experiments in progress. Minimum prerequisite is one year of chemistry or biology and mathematics through vector algebra and calculus.
Style: 60% Lecture, 40% Discussion. Homework and working examples on board.
Grading: 100% laboratory evaluation.
Exam Format: No exam

BioC 6011 Biochemistry for Dental Students
A-F only, 4 credit(s);
Instructor: Bielinsky, Anja K
Description: COURSE OBJECTIVES To understand the molecular components of biochemistry Students should understand the building blocks (amino acids, lipids, carbohydrates, and nucleotides) and their assembly into proteins, membranes, RNA and DNA. The shape of a protein determines its function, and variables altering protein structure should be remembered and understood. To understand energy concepts in biochemistry Energy in biochemistry can exist as a pH gradient, an electrochemical gradient, a reduced organic molecule or a molecule with high group transfer potential. Students should recognize how these different types of energy can be formed, used and interconverted. To understand catalysis in biochemistry Catalysis makes reactions occur more quickly, but does
not change whether they are favorable or not. Catalysis involves enzymes and often cofactor, which are usually derived from vitamins. Catalysis is regulated using several strategies. To understand how energy is generated in biochemistry Students should understand how biochemistry can use glucose to generate energy both with and without oxygen. Students should recognize that anaerobic fermentation of glucose to lactic acid is the source of acid that causes tooth decay. Students should know the pathways of glycolysis, citric acid cycle and oxidative phosphorylation. To understand how energy can be stored in biochemistry Students should understand how energy can be stored as sugars or fats. Students should know the pathways of gluconeogenesis, fatty acid oxidation and synthesis. To understand basic concepts of molecular biology Students should know the structure and composition of DNA and RNA. They should be familiar with DNA metabolism (replication, repair, recombination), the genetic code, basic concepts of gene expression and translational control. Students should also understand how defects in DNA metabolism contribute to cancer. To understand the modern ramifications of molecular biology and recombinant DNA technology as they apply to human health and dentistry in particular. Students should be familiar with basic cloning techniques and new technologies, such as genetic profiling that will likely be part of daily practice in the foreseeable future. They will also be exposed to the basic principles of stem cell technology. To understand basic concepts of signal transduction Students should understand how external stimuli are translated into molecular action. Students will be exposed to examples that are relevant to human health and their profession (e.g., signal transduction in B- and T-cell activation).

**Style:** 80% Lecture, 15% Discussion, 5% Guest Speakers.

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**BioC 6021 Biochemistry**

| Credit(s): | 3 | general biology, organic chemistry, instr consent | intended for MBS students | Credit will not be granted if credit has been received for: BIOC 3021; |
| Instructor: | Roon, Robert J |
| Description: | This course is a one-semester survey of the fundamentals of biochemistry and is part of the core curriculum required for a Biology major in the College of Biological Sciences. The objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare the student to comprehend the composition of living cells and their physiological processes at the molecular level. Lectures consider the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of acid-base equilibria, enzyme catalysis and bioenergetics; fundamental metabolic pathways, and the chemical nature of genetic information storage and expression. The prerequisite reflects the strong emphasis on facility with organic chemistry. This course requires regular study effort on the part of the student. Students who plan to major in biochemistry should enroll in the alternate two-semester series, BioC 4331 and BioC 4332. |
| Style: | 100% Lecture. |
| Grading: | 75% mid exam, 25% final exam. |
| Exam Format: | Short answer, write structures, multiple choice, solve problems, short essays |

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**BioC 6021 Biochemistry**

| Credit(s): | 3 | general biology, organic chemistry, instr consent | intended for MBS students | Credit will not be granted if credit has been received for: BIOC 3021; |
| Instructor: | Adolph, Kenneth W. |
| Description: | The course is a survey of biochemistry that covers the molecular composition of living cells and the biological processes involving these molecules. The course first deals with the four major classes of biochemical molecules: nucleic acids, proteins, lipids, and carbohydrates. This includes their building blocks (nucleotides, amino acids, fatty acids, and monosaccharides), and how the building blocks are linked together to form macromolecules. The course then considers how the macromolecules interact with other molecules to carry out the biological functions of the cell. In particular, the metabolic pathways that generate cellular energy are discussed, as are the processes involving DNA and RNA that lead to the synthesis of proteins. |
| Style: | 100% Lecture. |
| Grading: | 75% mid exam, 25% final exam. |

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**BioC 6021 Biochemistry**

| Credit(s): | 3 | general biology, organic chemistry, instr consent | intended for MBS students | Credit will not be granted if credit has been received for: BIOC 3021; |
| Instructor: | Schottel, Janet L |
| Description: | This course is a one-semester survey of the fundamentals of biochemistry and is part of the core curriculum required for a Biology major in the College of Biological Sciences. The objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare the student to comprehend the composition of living cells and their physiological processes at the molecular level. Lectures consider the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of acid-base equilibria, enzyme catalysis and bioenergetics; fundamental metabolic pathways, and the chemical nature of genetic information storage and expression. The prerequisite reflects the strong emphasis on facility with organic chemistry. This course requires regular study effort on the part of the student. Students who plan to major in biochemistry should enroll in the alternate two-semester series, BioC 4331 and BioC 4332. |
| Style: | 100% Lecture. |
| Grading: | 75% mid exam, 25% final exam. |
| Exam Format: | Short answer, write structures, multiple choice, solve problems, short essays |
BioC 8001 Biochemistry: Structure, Catalysis, and Metabolism
  3 credit(s);
  Instructor: Ohlendorf, Douglas Henry
  Description: BioC 8001 is one of three core classes for first year students of the MCSB umbrella graduate program. The mission assignment for these courses is summarized in three abbreviated points: 1) Courses will be designed to provide essential background; particularly (for) those who are not majoring in the area of the course. 2) The Courses will be taught at the level of a first year graduate course (not an upper division undergraduate course). 3) Courses will consist primarily of lectures based on graduate level textbooks (and) will not be primarily literature-based; (Material can be) supplemented with literature sources. Within these guidelines, BioC 8001 was assigned to cover enzyme kinetics, structure, catalysis, metabolism and bioenergetics. The point of reference used to define a graduate level knowledge is the textbook by Voet and Voet, Edition 3. A few lectures on important related topics have been added to enhance understanding of some cutting edge issues in these areas. The first 14 class periods are given by Dr. Nelsestuen and cover biocatalysis and metabolic inter-conversions in biology with considerable discussion of thermodynamics in metabolism. The next 20 class periods are given by Dr. Ohlendorf and focus on structure and interactions of biological macromolecules as well as enzyme kinetics. The last 8 class periods and final exam are by Dr. Nelsestuen and deal with a mixture of topics including bioenergetics of metabolism, metabolic regulation by hormonal action and the effect of cellular crowding and cell structures on specific pathways and regulation events.

BioC 8002 Molecular Biology and Regulation of Biological Processes
  A-F only, 3 credit(s);
  Instructor: Harris, Reuben
  Description: A wide range of classical to current cutting-edge topics in molecular biology are discussed. Topics include all aspects of DNA, RNA and protein biology ranging from fundamentals such as DNA replication, repair & recombination, RNA transcription, editing & regulation, and protein translation & modification to new technologies such as deep-sequencing, micro-RNA and prions. The course is based mostly on primary literature with supplement from textbook materials and other sources.

BioC 8084 Research and Literature Reports
  S-N only, 1 credit(s), max credits 5, 5 completions allowed;
  Instructor: Ohlendorf, Douglas Henry
  Description: Student may contact DGS for information

BioC 8184 Graduate Seminar
  S-N only, 1 credit(s), max credits 5, 5 completions allowed;
  Instructor: Lipscomb, John D
  Description: Student may contact DGS for information

Bioethics, Center for  N-504 Boynton Health Service

BTHX 5010 Bioethics Proseminar
  A-F only, 2 credit(s);
  Instructor: DeBruin PhD, Debra Ann
  Description: An introduction to topics in bioethics, with enrollment limited to Bioethics graduate students, including graduate minors. Course objectives: The Proseminar serves to: (1) familiarize Bioethics graduate students with the wide range of topics that they may wish to pursue in their scholarship and eventual careers; (2) showcase faculty affiliated with the program in order to acquaint students with their research and assist students in locating potential mentors and advisors; and (3) give Bioethics graduate students a class cohort, to foster community among them.

BTHX 5100 Introduction to Clinical Ethics
BTHX 5210 Ethics of Human Subjects Research
3 credit(s);
Instructor: Song, John Young
Description: Student may contact the instructor or department for information.

BTHX 5300 Foundations of Bioethics
3 credit(s);
Instructor: Elliott Jr, Bruce Carleton
Description: Student may contact the instructor or department for information.

BTHX 5610 Research and Publication Seminar
1 credit(s);
Instructor: Miles MD, Steven Haverstock
Description: This seminar is focused on helping you write for publication. You will learn the basics of how to develop a topic, conduct a literature search, select a suitable publication and how to prepare and submit a manuscript and respond to editorial suggestions. Students will be asked to write several short pieces, one for publication during the seminar.
Style: 100% Discussion.
Grading: 50% reports/papers, 50% in-class presentation.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Miles MD, Steven Haverstock
Description: This is an advanced course for students who have an idea that they want to write for publication. Students are admitted on permission of the instructor after meeting and presenting their paper idea. Students are expected to write and submit the paper to a journal of their choice. The instructor will assist in topic development, literature review, drafting, journal choice and responding to editorial reviews. This is not a course in bioethics—students interested in bioethics studies should review course offerings from the Center for Bioethics.
Style: 100% Student Presentation.
Grading: 100% special projects.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Song, John Young
Description: Student may contact the instructor or department for information.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Elliott Jr, Bruce Carleton
Description: Student may contact the instructor or department for information.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: DeBruin PhD, Debra Ann
Description: Students propose area for study with faculty guidance, write proposal which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Liaschenko, Joan
Description: Student may contact the instructor or department for information.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Valapour, Maryam
Description: Student may contact the instructor or department for information.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Marshall, Mary Faith
Description: Student may contact the instructor or department for information.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Turner, Leigh
Description: Student may contact the instructor or department for information.

BTHX 8000 Advanced Topics in Bioethics: Nanotechnology, Law & Society
3 credit(s), max credits 8;
Instructor: Fatehi, Leili
Description: See http://www.law.umn.edu/current/courseguide.html

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Miles MD, Steven Haverstock
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Elliott Jr, Bruce Carleton
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Wolf, Susan M
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: DeBruin PhD, Debra Ann
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Liaschenko, Joan
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Valapour, Maryam
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Marshall, Mary Faith
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Turner, Leigh
Description: Student may contact the instructor or department for information.
BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Miles MD, Steven Haverstock
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Elliott Jr, Bruce Carleton
Description: Student may contact the instructor or department for information.

BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Wolf, Susan M
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: DeBruin PhD, Debra Ann
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Liaschenko, Joan
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Marshall, Mary Faith
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

BTHX 8900 Advanced Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Turner, Leigh
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

Biology 123 Snyder Hall

Biol 1001 Introductory Biology: Evolutionary and Ecological Perspectives
4 credit(s); Credit will not be granted if credit has been received for: BIOL 1001H; Meets CLE req of Biological Sciences
Instructor: STAFF
Description: Biol 1001, INTRODUCTORY BIOLOGY: EVOLUTIONARY AND ECOLOGICAL PERSPECTIVES introduces the discipline of biological science by focusing on the fundamental concept underlying all of biology—biological evolution. The course examines the mechanisms of evolution, the genetics underlying the process of heredity and evolutionary change (both within populations and as new species arise), and the historical context and social implications of the theory of evolution. You will learn about the evolutionary history of life on Earth (including the evolution of humans), sexual selection, and the evolution of behavior. We will also explore how evolution affects your life. At the end of the course, these concepts are put into the context of population, community, and ecosystem ecology, and conservation biology.
Style: 65% Lecture, 35% Laboratory.
Grading: 33% mid exam, 25% final exam, 15% reports/papers, 16% quizzes, 4% in-class presentation, 7% problem solving.
Exam Format: multiple choice lecture exams
Biol 1003 Evolution and Biology of Sex

Instructor: Cotner, Sehoya H

Description: Biol 1003, THE EVOLUTION AND BIOLOGY OF SEX examines evolution of sexual reproduction, genetics and biology of sex determination, sexual selection, human reproduction, disease transmission, the biology of love, human behavior, overpopulation and resource depletion. In both lecture and laboratory, you will explore what sex can teach us about ourselves by using scientific reasoning, articulation of testable hypotheses, and scientific data analysis. At the end of the course, you will have a better understanding of how sex affects our lives and be prepared to continue to learn about this fascinating topic.

Style: 65% Lecture, 35% Laboratory.

Grading: 33% mid exam, 25% final exam, 15% reports/papers, 16% quizzes, 4% in-class presentation, 7% problem solving.

Exam Format: multiple choice lecture exams

Biol 1003 Evolution and Biology of Sex

Instructor: Wassenberg, Deena Marie

Description: Biol 1003, THE EVOLUTION AND BIOLOGY OF SEX examines evolution of sexual reproduction, genetics and biology of sex determination, sexual selection, human reproduction, disease transmission, the biology of love, human behavior, overpopulation and resource depletion. In both lecture and laboratory, you will explore what sex can teach us about ourselves by using scientific reasoning, articulation of testable hypotheses, and scientific data analysis. At the end of the course, you will have a better understanding of how sex affects our lives and be prepared to continue to learn about this fascinating topic.

Style: 65% Lecture, 35% Laboratory.

Grading: 33% mid exam, 25% final exam, 15% reports/papers, 16% quizzes, 4% in-class presentation, 7% problem solving.

Exam Format: multiple choice lecture exams

Biol 1009 General Biology

Instructor: STAFF

Description: Biol 1009, General Biology, is a course for non-CBS majors seeking a broad survey of biology in a single semester. The course covers the major concepts and principles of contemporary biology and also provides the foundation needed to pursue further studies in the biological sciences. Topics include: structure and function of biological molecules, cell structure and function, energy recruitment and utilization, cellular reproduction, flow of genetic information through organisms and populations, principles of inheritance, evolution and ecology. If you are in pre-health sciences or another science major outside of CBS, you may need Biol 1009 to fulfill expectations of professional or graduate schools in your future.

Style: 65% Lecture, 35% Laboratory.

Grading: 34% mid exam, 21% final exam, 10% reports/papers, 25% quizzes, 10% other evaluation. Unannounced lecture quizzes

Exam Format: multiple choice lecture exams

Biol 1009 General Biology

Instructor: Brooker, Robert James

Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit “Class URL” for ODL policies, including fee and financial aid restrictions. The course focuses on four fields of biology: cell biology, genetics, evolution, and ecology. The course is divided into 13 lessons. Three of these lessons (lessons 4, 8, and 13) are exams. The other 10 lessons focus on topics in biology. Each of these 10 lessons covers two or three chapters in your textbook. You will also view online lectures that cover these chapters. For each lesson, you will turn in a homework assignment online, which I will grade and return to you. You will also take a quiz to see if you have a good understanding of the material.

Style: Online with handwritten exams

Grading: 40% mid exam, 24% final exam, 10% quizzes, 10% written homework, 16% laboratory evaluation.

Exam Format: Supervised, in-person (not online) exams.

Biol 1010 Human Biology: Concepts and Current Ethical Issues

Instructor: Palmer PhD, Melissa L

Description: Biol 1010, HUMAN BIOLOGY, looks at the human body and current issues pertaining to this marvelous structure. We will examine structures from the smallest units of life to the whole organism, including learning modules on how different cells, organs and organ systems work. Along with learning the essential human structural form and function, we will also have weekly, lively discussions
and debates on ethics, which considers many interesting topics on how we as humans impact our society and environment. Weekly debates include: Should we use human stem cells for therapy? Should we clone humans? What are the promises and perils of genetic testing? Voluntary breast removal to prevent cancer... Could you do it? Is overweight overstated? Who should make life and death decisions for you? The laboratory includes opportunities to learn more about anatomical features and measure different functions of the human body. In addition, in order to more effectively understand human biological processes, animal dissections are required. Special attention is placed upon mammalian anatomy through dissection of the fetal pig.

**Style:** 66% Lecture, 33% Laboratory. Lectures include active learning exercises in small groups, discussions and debates.

**Grading:**
- 22% mid exam
- 22% final exam
- 8% journal
- 8% in-class presentation
- 7% class participation
- 33% laboratory evaluation

**Exam Format:** Lecture exams are multiple choice.

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**Biol 1020 Biology Colloquium**

S-N only, 1 credit(s), max credits 2;

**Instructor:** Hanna, Kathryn L

**Description:** This is a unique class, organized and run by upper division students, recommended for those who wish to explore the various fields and career alternatives in the biological sciences. The class gives students the chance to interact with biology faculty and students with similar interests. The Biology Colloquium offers both large-group seminars, featuring prominent scientists discussing their research programs or other speakers discussing their careers in biology, internship opportunities or health care careers. Small-group tours take you to research facilities on and off campus, such as the Raptor Rehabilitation Center, Cancer Center, Experimental Surgery Services, or research and development laboratories at Ecolab, Inc. Socially, Colloquium students always find time for fun, too, either on a field trip, studying together in the student lounge, or participating in the optional tours or weekend events. Students may begin the Colloquium class any semester (preferably early in their academic studies) and take it two times. The second semesters allows you to conduct a project (see Biol 1093). This course is also the stepping stone to leadership responsibilities in the Biology Colloquium Program (see Biol 3600).

**Style:** 10% Discussion, 50% Field Trips, 40% Guest Speakers. Class time is split between large group sessions and tours to science facilities.

**Grading:** 50% attendance, 50% reflection paper. Class attendance is required.

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**Biol 1050 Our Global Environment: Science and Solutions**

3 credit(s); Meets CLE req of Environment

**Instructor:** Pompei, Vanessa Duong

**Description:** What are environmentally sound food choices? Is global warming a conspiracy? Are pesticides turning male frogs into females? These and other questions are explored in Biology 1050. Our Global Environment: Science and Solutions. This course meets the CLE ENV theme, has no prerequisites and is appropriate for individuals with some high school science background. We will focus on approaching environmental problems as scientists. This course will approach a the topics of biodiversity, environmental toxicology, food choices and global climate change, concentrating on the skills of inquiry that can be applied to any scientific question. This means we will evaluate data and experimental design, we will propose experiments and we will learn to carefully consider sources of data.

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**Biol 1093 Biology Colloquium: Directed Study**

S-N only, 1 credit(s);

**Instructor:** Hanna, Kathryn L

**Description:** This course allows students early in their studies to explore various biology disciplines through an independent project or beginning research experience under the supervision of a faculty sponsor. The Biology Colloquium Student Leaders will help you find the biology-related project that fits your interests and allows you to earn University credit as well as try out the world of research. To be eligible, students must have taken one previous Biology Colloquium class (Biol 1020) and also be concurrently enrolled in the Biology Colloquium (Biol 1020). Examples of previous projects include: work with anaerobic bacteria, helping with data analysis in the lion project, working on chemical carcinogenesis, fruit fly genetics, liver cell research, monarch butterfly research, and many, many other projects across the University.

**Style:** Independent project working at least 3 hours per week on project.

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**Biol 1301 Becoming a Reflective Leader**

S-N only, 1 credit(s);

**Instructor:** Russell, Kathrine Anna

**Description:** Student may contact the instructor or department for information.

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**Biol 1301 Becoming a Reflective Leader**

S-N only, 1 credit(s);

**Instructor:** Novack, Lisa Marie

**Description:** Student may contact the instructor or department for information.
Biol 1301 Becoming a Reflective Leader
S-N only, 1 credit(s);
Instructor: Thul, Meaghan Miller
Description: Student may contact the instructor or department for information.

Biol 1805 Nature of Life: Introducing New Students to the Biological Sciences
S-N only, 1 credit(s);
Instructor: Wright, Robin
Description: Content modules focus on topics ranging from biological molecules to ecosystems. Topics will include ethical behavior in the sciences, opportunities for team building and development of a sense of community. There will be a reflective writing assignment. Held at Itasca Biological Station and Laboratories. Transportation, board, and lodging fee - $250.00. Required of all entering CBS Freshmen.
Style: 25% Lecture, 25% Discussion, 25% Laboratory.
Grading: 50% class participation, 50% other evaluation. Reflective papers

Biol 1905 Freshman Seminar for the Biological Sciences: Farewell to Arms: Bio Insights Conduct of Society
A-F only, 1 credit(s), max credits 6;
Instructor: Lehman, Clarence L
Description: Warfare and violence have so long been part of human society that they may seem inevitable. Are they? What can biology tell us? Is the world becoming more violent with time, or are things getting better? Is our species intrinsically violent? If so, is that the end of the story, or as a thinking species can we moderate and ultimately eliminate our worst tendencies? In this seminar, we will examine these questions through reading and discussion, and consider how aggression, sex, love, and ethics can arise under biological evolution and can develop within society, and how we can use an understanding of reality to make a safer world. Robert Elde is Dean of the College of Biological Sciences and a professor in the Department of Neuroscience. Clarence Lehman is Associate Dean of Research and Graduate Education and adjunct faculty in the Department of Ecology, Evolution, and Behavior. Both want to apply the strengths of post-genomic biology to the problems of this developing century.

Biol 1905 Freshman Seminar for the Biological Sciences: Evolutionary Biology of You
A-F only, 1 credit(s), max credits 6;
Instructor: Decker, Mark David
Description: Attempts to prohibit or limit the teaching of evolution in public schools in the United States have been ongoing for many decades. Such efforts have tended to focus on the teaching of human evolution, even though, as Charles Darwin noted, each of us bears ?the indelible stamp of (our) lowly origin.? In this seminar, we will discuss the basics of the evolutionary process, will review the history of attempts to curtail the teaching of evolution, and will then focus on how each of us ? products of the evolutionary process ? demonstrate the reality and action of evolution. The course will take advantage of the small-class seminar format, emphasizing discussions and short (and low-stress!) student presentations. Mark Decker is co-director of the Biology Program within the College of Biological Sciences. His interests include evolutionary biology and ecology, and he is the co-author of two recent books on the history of the evolution-creationism controversy. He teaches several different introductory biology courses and has a particular interest in promoting scientific literacy in non-scientists.

Biol 1905 Freshman Seminar for the Biological Sciences: Marine Physiology & Underwater Naturalist Seminar
A-F only, 1 credit(s), max credits 6;
Instructor: Palmer PhD, Melissa L
Description: This seminar will examine key concepts in diving physiology, along with a systematic look at marine organisms in their natural environment. Students will also focus on how these animals adapt and survive under constant ecological and environmental pressures. Human diving physiology (SCUBA) will also be discussed. Melissa Palmer graduated with her PhD from the University of Minnesota's Integrative Biology and Physiology (IBP) Program. She is currently in the Biology Program and teaches Human Biology (Biol 1010), Animal Physiology (Biol 3211), and General Zoology (Biol 2012), along with an upper division undergraduate/graduate level course, Cell Physiology (Biol 4700/Phsl 5700). She is also a diving enthusiast.

Biol 1905 Freshman Seminar for the Biological Sciences: Photographing the University Community
A-F only, 2 credit(s), max credits 6;
Instructor: Lange, Alex John
Description: Photographing the University Community will provide students and faculty an opportunity to explore the art of photojournalism and/or documentary photography. Students and faculty will take photographs on the University campus or the surrounding neighborhoods and then each student and faculty member will assemble their photographs into a coherent essay. The course will include social themes, and have a strong writing component as well as the obvious focus on photography. Robert J. Roon is a veteran of more than 30 years of university teaching. His eclectic interests range from neuroscience and nutrition to the origins of human life and Northwest Coast Native American art. He also sings in a men's choral group and co-parents his eight-year-old
grandson. He has been taking photographs for 50 years and in the past few years, he has averaged 20,000 photographs per year. Alex Lange is an associate professor in biochemistry. He received his Ph.D in nutritional biology from Cornell University. His research interests include diabetes; metabolite sensing and signaling and metabolic enzyme regulation.

**Biol 1905 Freshman Seminar for the Biological Sciences: The Nature of Research: Is It For You?**

- **A-F only, 3 credit(s), max credits 6;**
- **Instructor:** Marks, M David
- **Description:** The Nature of Research Life: There will be two parts to this course. In the first part we will have formal classroom meetings where you will meet with researchers from all levels -- from current undergraduates working in labs to Full Professors. We will discuss how and why they ended up in research. In the second part you will participate in a National Science Foundation funded research project. You will receive hands on experience in using state of the art techniques to address basic scientific questions concerning Cell Biology. M. David Marks is an active researcher in the field of Plant Developmental Biology. He uses the development of plant hairs, called trichomes, as a model system to study how cells in a multi-cellular organism become different from one another.

**Biol 1905 Freshman Seminar for the Biological Sciences: Being Human**

- **A-F only, 2 credit(s), max credits 6;**
- **Instructor:** Phillips, Jane Ann
- **Description:** There is nothing more fascinating to humans than humans. From the biology of our bodies to the spirituality of our minds, we spend a lifetime investigating who we are. In this seminar, we will explore a small subset of all that it means to be human, particularly focusing on the intersection of biology, evolution, and ethics. We will explore where we came from to where we are going, how we study ourselves and how we use the information we find to better our health, and how better self-awareness will lead us to decisions we can live with. Jane Phillips has been teaching at the undergraduate level for over 30 years, both here at the University of Minnesota and at UW-Madison. Her recent courses have been Biol 1003 (Evolution and Biology of Sex), Biol 3700 (Nature of Science and Research), and Biol 1905 (Being Human) for the past three fall semesters. Her course evaluations have been very high for many years and are available for review.
- **Style:** 10% Lecture, 50% Discussion, 40% Student Presentation. Presentations involve leading group discussions.
- **Grading:** 40% reports/papers, 40% in-class presentation, 20% class participation.

**Biol 1905 Freshman Seminar for the Biological Sciences: Genomics: Applications in Biomed Sci and Biotech**

- **A-F only, 1 credit(s), max credits 6;**
- **Instructor:** Hackett Jr, Perry B
- **Description:** GENOMICS: Applications in Biomedical Science and Biotechnology DNA and genomes are discussed in the many contexts including medical science (diagnosing disease and finding miracle cures), CSI, ethics, the modification of life at every level on the planet, etc. Students will discuss their thoughts on a variety of controversial issues both on-line and in formal group presentations. In addition to learning about how our understanding of DNA and genomes has infiltrated every aspect of society, students will develop their process of thinking about complex problems by writing short opinions and evaluating those of others in the class. Perry Hackett has been a professor of genetics and cell biology for more than 28 years at the U of M. He is also a co-founder of two local biotech startup companies that focus on genome engineering for human gene therapy and animal biotechnology. He is especially interested in conveying to students the awesome possibilities of modern genetics and the importance of seeking answers to important questions that science continues to raise.

**Biol 1905 Freshman Seminar for the Biological Sciences: Get to Know Your Cup of Joe**

- **A-F only, 1 credit(s), max credits 6;**
- **Instructor:** Pompei, Vanessa Duong
- **Description:** Humans have been drinking coffee for centuries. It's a pick-me-up, it's a comfort drink, and it's tasty (usually). With a coffee shop on practically every corner, it seems that coffee is our nation's favorite beverage. I am drinking a cup of coffee as I write this course description. In this seminar, we will look at the natural history of the plants we get coffee beans from, the history of coffee as a crop, the chemistry of coffee and caffeine, and some environmental issues associated with growing and producing coffee. We will follow the beans from plant to cup and discuss the biological, environmental, political and sociological issues surrounding our beloved cup of Joe. Vanessa Pompei is an Assistant Education Specialist in the Biology Program in the College of Biological Sciences. She has a Bachelor's degree in Zoology (U.C. Santa Barbara and a Master's degree in Conservation Biology (University of Minnesota). She is interested in scientific literacy and teaching biology to non-scientists, as well as teaching biology majors.

**Biol 1905 Freshman Seminar for the Biological Sciences: Understanding Evolution-Creationism Controversy**

- **A-F only, 1 credit(s), max credits 6;**
- **Instructor:** Moore, Randy
- **Description:** This course has two goals: 1) to help you succeed at the University of Minnesota, and 2) to help you develop your own understanding and appreciation of the evolution-creationism controversy. Succeeding at the University of Minnesota - Each week we'll talk about concerns and/or questions you have about life at the U. Although I can't fix your parking tickets, I can tell you about what
you'll need to do to succeed here. The evolution-creationism controversy - We'll discuss the many aspects of this controversy, including its history, legacy, relevance, and key people. We will also discuss a variety of issues related to the controversy, including those involving court decisions, public opinion, and related issues (e.g., racism, politics, etc.). Many people are emotional and opinionated about the evolution-creationism controversy. Although the focus of this course is not on opinions, we will talk about why so many people feel strongly about these issues, and why the controversy persists. You'll be interested in, and probably surprised by, what you learn.

**Biol 1905 Freshman Seminar for the Biological Sciences: Climate Change Literacy 101**
A-F only, 1 credit(s), max credits 6;
Instructor: Powers, Jennifer Sarah
Description: Have you ever wondered if all of the discussion about climate change is just hot air? In this seminar, we will consider the robust scientific evidence for global climate change through a number of ways including readings from the popular and primary literature, interviews with scientists, and films. There is no background required. Jennifer Powers is broadly trained in ecosystems ecology and biogeochemistry. Her research interests include understanding how carbon cycling in tropical forests is affected by changes in land use and ongoing climate change. Her teaching interests include promoting ecological literacy for general audiences.

**Biol 1905 Freshman Seminar for the Biological Sciences: Novel Environment: Themes Explored Thru Literature**
A-F only, 2 credit(s), max credits 6;
Instructor: Wassenberg, Deena Marie
Description: This course will explore environmental themes in popular literature. We will do an in-depth study of the topics we encounter in the literature and evaluate what makes quality environmental literature. Deena Wassenberg grew up in Wisconsin. She received her B.S. degree in zoology and conservation from the University of Wisconsin-Madison and her Ph.D. from Duke University studying environmental toxicology. Her current research interests involve biology education for both biology majors and non-biology majors.

**Biol 1905 Freshman Seminar for the Biological Sciences: Solutions inspired by the tree of life**
A-F only, 1 credit(s), max credits 6;
Instructor: Snell-Rood, Emilie
Description: We have a lot to learn from the millions of species of plants, animals and microbes in the world. This course surveys the ways in which diverse organisms can inspire solutions to a range of problems, from energy production and waste disposal, to chemical manufacture and crop development, to architecture and human health. Building on examples from the field of biomimicry and principles of evolutionary biology, this seminar illustrates strategies for discovering novel answers and realizing the possible limitations of these solutions.

**Biol 2001 Career Planning for Biologists**
S-N only, 1 credit(s);
Instructor: Underwood, Jean M
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based. One-to-one meeting with instructor is required. Time will be spent attending activities and events in addition to online component.
Grading: Points will be earned through the completion of required course activities.

**Biol 2001 Career Planning for Biologists**
S-N only, 1 credit(s);
Instructor: Georgeson, Sara K I
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based.

**Biol 2001 Career Planning for Biologists**
S-N only, 1 credit(s);
Instructor: LeFay MS, Lisa
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based.
Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: Mráz, Anna Catherine
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based.

Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: Fraasch, Nancy S
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based.

Biol 2002 Foundations of Biology for Biological Sciences Majors, Part I
A-F only, 6 credit(s); [CHEM 1021 or 1061 or equiv], CBS major] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002H; Meets CLE req of Biological Sciences
Instructor: Decker, Mark David
Description: Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call ?concept lab?). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions. Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University's policy of 3 hours of effort per credit to earn an average grade. http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%), c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%)
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities.
Grading: 15% quizzes.

Biol 2002 Foundations of Biology for Biological Sciences Majors, Part I
A-F only, 6 credit(s); [CHEM 1021 or 1061 or equiv], CBS major] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002H; Meets CLE req of Biological Sciences
Instructor: Wick, Susan M
Description: Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call ?concept lab?). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions. Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University's policy of 3 hours of effort per credit to earn an average grade. http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%), c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%)
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities.
Grading: 15% quizzes.
Biol 2002 Foundations of Biology for Biological Sciences Majors, Part I

A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002H;Meets CLE req of Biological Sciences
Instructor: Gibbens PhD,Brian

Description: Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call ?concept lab?). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions. Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University?s policy of 3 hours of effort per credit to earn an average grade. http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%), c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%)
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities.
Grading: 15% quizzes.

Biol 2002 Foundations of Biology for Biological Sciences Majors, Part I

A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002H;Meets CLE req of Biological Sciences
Instructor: Soto,William

Description: Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call ?concept lab?). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions. Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University?s policy of 3 hours of effort per credit to earn an average grade. http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%), c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%)
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities.
Grading: 15% quizzes.

Biol 2002H Foundations of Biology for Biological Sciences Majors, Part I

A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major, honors student] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002;Meets CLE req of Biological Sciences
Instructor: Decker,Mark David

Description: Biol 2002 is intended for majors in the College of Biological Sciences. It is the first of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes evolution, organismal diversity, and genetics within the context of problem solving and application. The lecture/recitation sections are integrated with laboratory exercises to give students basic experience with the methods of modern biology. Student participation is encouraged.
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities. This class is based on a team-based learning model.
Grading: 13% mid exam, 12% final exam, 15% special projects, 20% quizzes, 5% class participation, 35% laboratory evaluation. Projects and 25% of quiz grades are based on team efforts.

Biol 2002H Foundations of Biology for Biological Sciences Majors, Part I

A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major, honors student] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002;Meets CLE req of Biological Sciences
Instructor: Wick,Susan M

Description: Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This
course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call ?concept lab?). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions. Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University?'s policy of 3 hours of effort per credit to earn an average grade. http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%), c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%) 

Biol 2002H Foundations of Biology for Biological Sciences Majors, Part I
A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major, honors student] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002;Meets CLE req of Biological Sciences
Instructor: Gibbens PhD,Brian
Description: Biol 2002 is intended for majors in the College of Biological Sciences. It is the first of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes evolution, organismal diversity, and genetics within the context of problem solving and application. The lecture/recitation sections are integrated with laboratory exercises to give students basic experience with the methods of modern biology. Student participation is encouraged.
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities. This class is based on a team-based learning model.
Grading: 13% mid exam, 12% final exam, 15% special projects, 20% quizzes, 5% class participation, 35% laboratory evaluation. Projects and 25% of quiz grades are based on team efforts.

Biol 2002H Foundations of Biology for Biological Sciences Majors, Part II
A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major, honors student] or dept consent ; calculus I or equiv recommended
Credit will not be granted if credit has been received for: BIOL 2002;Meets CLE req of Biological Sciences
Instructor: Soto,William
Description: Biol 2002 is intended for majors in the College of Biological Sciences. It is the first of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes evolution, organismal diversity, and genetics within the context of problem solving and application. The lecture/recitation sections are integrated with laboratory exercises to give students basic experience with the methods of modern biology. Student participation is encouraged.
Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities. This class is based on a team-based learning model.
Grading: 13% mid exam, 12% final exam, 15% special projects, 20% quizzes, 5% class participation, 35% laboratory evaluation. Projects and 25% of quiz grades are based on team efforts.

Biol 2003 Foundations of Biology for Biological Sciences Majors, Part II
A-F only, 3 credit(s);2002 or 2002H or CBS majorCredit will not be granted if credit has been received for: BIOL 2003H;
Instructor: Decker,Mark David
Description: BIOL 2003 is intended for majors in the College of Biological Sciences. It is the second of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes ecology and biochemistry within the context of problem solving and application. This second semester emphasizes application of quantitative skills, concepts, and tools to biological problems through independent research. While students will meet regularly with instructors, they also will be responsible for scheduling their time in an open lab in order to complete their research project. At the end of this course, students will be qualified to enter a faculty research lab, internship, or other venue of active science.

Biol 2003 Foundations of Biology for Biological Sciences Majors, Part II
A-F only, 3 credit(s);2002 or 2002H or CBS majorCredit will not be granted if credit has been received for: BIOL 2003H;
Instructor: Strain PhD,Anna Karin
Description: This course emphasizes ecology and biochemistry within the context of problem solving and application. Emphasis is placed on application of quantitative skills, concepts, and tools to biological problems through independent research.

Biol 2003 Foundations of Biology for Biological Sciences Majors, Part II
Biol 2004 Foundations of Biology for Biological Sciences Majors, Part II
A-F only, 3 credit(s); 2002 or 2002H or CBS major
Credit will not be granted if credit has been received for: BIOL 2003H;  
Instructor: Williams, Mary A.  
Description: BIOL 2003 is intended for majors in the College of Biological Sciences. It is the second of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes ecology and biochemistry within the context of problem solving and application. This second semester emphasizes application of quantitative skills, concepts, and tools to biological problems through independent research. While students will meet regularly with instructors, they also will be responsible for scheduling their time in an open lab in order to complete their research project. At the end of this course, students will be qualified to enter a faculty research lab, internship, or other venue of active science.

Kirkpatrick, Catherine

Biol 2004H Foundations of Biology for Biological Sciences Majors, Part II Laboratory
A-F only, 3 credit(s); 2002 or 2002H or CBS major
Credit will not be granted if credit has been received for: BIOL 2004H;  
Instructor: Kirkpatrick, Catherine  
Description: Biol 2004 is intended for majors in the College of Biological Sciences. It accompanies Biol 2003. This course emphasizes application of quantitative skills, concepts, and modern molecular tools to biological problems through independent research on real-world questions. Students will meet regularly with instructors, but they also will be responsible for scheduling their time in an open lab in order to complete their research project. Students should expect to spend 4-6 hours per week in the lab. At the end of this course, students will be qualified to enter a faculty research lab, internship, or other venue of active science.

Wassenberg, Deena Marie

Biol 2003 Foundations of Biology for Biological Sciences Majors, Part II
A-F only, 3 credit(s); 2002 or 2002H, honors
Credit will not be granted if credit has been received for: BIOL 2003;  
Instructor: Decker, Mark David  
Description: BIOL 2003 is intended for majors in the College of Biological Sciences. It is the second of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes ecology and cell biology within the context of problem solving and application. Emphasis is placed on application of quantitative skills, concepts, and tools to biological problems through independent research.

Brooker, Robert James

Biol 2003H Foundations of Biology for Biological Sciences Majors, Part II
A-F only, 3 credit(s); [2002 or 2002H], honors
Credit will not be granted if credit has been received for: BIOL 2003;  
Instructor: Brooker, Robert James  
Description: BIOL 2003H is intended for majors in the College of Biological Sciences. It is the second of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This second course emphasizes ecology and cell biology within the context of problem solving and application. The class uses team-based learning and student participation is strongly encouraged.

Kirkpatrick, Catherine

Biol 2003H Foundations of Biology for Biological Sciences Majors, Part II Laboratory
A-F only, 3 credit(s); [2002 or 2002H], honors
Credit will not be granted if credit has been received for: BIOL 2003;  
Instructor: Wassenberg, Deena Marie  
Description: BIOL 2003H is intended for majors in the College of Biological Sciences. It is the second of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This second course emphasizes ecology and cell biology within the context of problem solving and application. The class uses team-based learning and student participation is strongly encouraged.

Williams, Mary A.
research on real-world questions. Students will meet regularly with instructors, but they also will be responsible for scheduling their time in an open lab in order to complete their research project. Students should expect to spend 4-6 hours per week in the lab. At the end of this course, students will be qualified to enter a faculty research lab, internship, or other venue of active science.

**Biol 2005 Animal Diversity Laboratory**

2 credit(s); Credit will not be granted if credit has been received for: BIOL 2012;

Instructor: STAFF  

**Description:** This is a laboratory course and requires dissection and direct observation of animal diversity with emphasis upon morphology. The phylogenetic survey, from unicellular protists through the vertebrates, includes a wide array of organismal variation. Special attention is placed upon mammalian anatomy through dissection of the fetal pig. Students develop an understanding of the patterns and complexities of animal diversity through the experience of hands-on laboratory exercises.  

**Style:** 5% Discussion, 95% Laboratory.  

**Grading:** 55% mid exam, 37% final exam, 8% quizzes.  

**Exam Format:** multiple choice/practical

**Biol 2012 General Zoology**

4 credit(s); One semester of college biology  

Credit will not be granted if credit has been received for: BIOL 2005;  

Instructor: Powell, Alexis F L A  

**Description:** Student may contact the instructor or department for information.

**Biol 2022 General Botany**

A-F only, 3 credit(s);  

Instructor: May, Georgiana  

**Description:** To introduce principles of plant biology, including the organization, growth and development, reproduction and ecology of plants and related organisms; To gain an understanding of the plant evolution and diversity; To promote an integrated understanding of plant structure and function, and of interactions between plants and associated organisms; To explore the utilization of plants by humans; and To prepare for further study of basic plant biology; of the roles of plants in the environment; of plants as source materials for agriculture, biotechnology, horticulture and forestry.  

**Style:** 50% Lecture, 50% Laboratory.  

**Grading:** 27% mid exam, 27% final exam, 13% quizzes, 33% laboratory evaluation. 5% optional extra credit paper  

**Exam Format:** multiple choice, short essay, short answer

**Biol 2301 Leadership and Service**

S-N only, 2 credit(s);  

Instructor: Letawsky Shultz, Nikki  

**Description:** This course is part of the CBS Deans' Scholars program curriculum. This course is designed for you to reflect on the importance of civic responsibility and service in leadership, understand how personal experiences influence perspectives on social issues, and learn techniques for effective group work. The course provides you an opportunity to partner with a community organization during the semester based on articulated service outcomes. You will reflect on your work with the organization throughout the semester and consider your experiences as they relate to the content covered in the course. Course Learning Objectives: You will achieve the following objectives upon completion of the course:  

- Articulate the importance of civic responsibility and service in leadership  
- Define and develop skills to work effectively in diverse groups  
- Understand how personal values and experiences influence perspectives on social issues  

Service Objectives:  

- Objectives of service projects are determined by the needs of the community organization and developed in partnership with the Career and Community Learning Center at the University of Minnesota. Your service learning experience will be focused upon issues related to the biological sciences, health sciences, your future career goals, and/or a social issue in which you have a particular interest.

**Biol 2331 Anatomy and Physiology I**

A-F only, 4 credit(s); Meets CLE req of Biological Sciences  

Instructor: Dunbar, Robert Lee  

**Description:** Student may contact the instructor or department for information.

**Biol 2331 Anatomy and Physiology I**

A-F only, 4 credit(s); Meets CLE req of Biological Sciences  

Instructor: Petzold, Andy M  

**Description:** Student may contact the instructor or department for information.

**Biol 2960H Exploring Research in the Biological Sciences**

A-F only, 1 credit(s);
Instructor: Davis, Dana
Description: Student may contact the instructor or department for information.

Biol 3007W Plant, Algal, and Fungal Diversity and Adaptation
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Mc Laughlin, David J
Description: This course will introduce students to the evolution and diversity of plants, algae, and fungi. We will pay particular attention to the adaptations of organisms to the environment and the varied interactions among organisms in communities. For each group of organisms, we will explore major evolutionary transitions in function, structure, and reproduction. The laboratory will provide a hands-on introduction to major groups of plants and fungi, emphasizing how attributes of organisms are adapted to habitats in which they occur. The lab will also provide experience in formulating hypotheses, designing experiments and analyzing data. This course is writing intensive; therefore, a significant portion of the grade will be based on written work. Students will write papers based on experiments done in the lab as well as in response to articles from the primary literature.

Biol 3209 Understanding the Evolution-Creationism Controversy
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Moore, Randy
Description: This course will help you develop your own understanding of the evolution-creationism controversy and, in the process, prepare you to understand how the controversy (and its associated civic and ethical issues) affects communities in their everyday lives. Although we will discuss the science underlying evolution, most of controversy is based not on science, but on social and civic issues. We'll examine how society has debated and otherwise dealt with the controversy, especially how 1) the controversy has developed in the past 150 years, and 2) how various ethical and civic issues have pervaded the controversy, and 3) how the controversy has been assessed by individuals, organizations, and communities (e.g., churches, politicians). Students will have many opportunities to apply their knowledge to modern versions of the controversy (e.g., "intelligent design") through discussions, assignments, guest speakers, and mock trials. These activities will 1) encourage you to think about how this controversy affects various people, organizations, and communities, 2) help you reflect on the roles of common and powerful societal forces such as science and religious faith, and 3) help you integrate the often-overlapping roles of science, politics, religious faith, and other aspects of modern society. Taken together, these activities will help you acquire the interests, skills, and breadth of experiences to be an informed and engaged citizen. The course-lectures, discussions, activities, and assignments will challenge you to understand how the many ethical principles, beliefs, and attitudes of individuals and various social groups were developed, affect, and are affected by, the ethical and societal intersections of science, religion, politics, and education. A basic part of this understanding is an awareness of how ethics influence how individuals and groups determine what should be done with important, contentious issues and information. For example, what processes do stakeholders such as educators, churches, and politicians use to address issues that involve collisions between society and religion? Finally, this course will help you develop your own understanding and appreciation of the evolution-creationism controversy. We'll discuss the many aspects of this controversy, including its history, legacy, relevance, and key people. We will also discuss a variety of issues related to the controversy, including those involving court decisions, public opinion, and related issues (e.g., racism, politics, etc.). Many people are emotional and opinionated about the evolution-creationism controversy. Although the focus of this course is not on opinions, we will talk about why so many people feel strongly about these issues, and why the controversy persists. You'll be interested in, and probably surprised by, what you learn.

Biol 3211 Physiology of Humans and Other Animals
3 credit(s);
Instructor: Goldstein, Stuart F
Description: The main objective is understanding how humans and other animals carry out a variety of functions (e.g. respiration, movement). We will start by looking at some underlying general phenomena (e.g. diffusion, membrane voltages) and structures (e.g. membrane receptors) that will be useful in understanding how animals carry out these functions. We will then look at a number of problems (e.g. the need for gas exchange) and the various systems used to solve these problems (e.g. lungs, gills). We will describe these systems at a variety of levels -- organismal, organ, tissue, cellular, and subcellular. There are two main goals of this course. One is to acquaint you with specific physiological systems. The other is to give you an overview that will help you visualize organisms in a way that integrates the various levels of organization. The hope is that, as you are introduced to more detailed descriptions of cellular and subcellular processes in later courses, you will see how these processes fit into the entire organism.
Style: 100% Lecture. 3 hours/week lecture
Grading: 50% final exam, 50% other evaluation. midterm exams (25% each)
Exam Format: multiple choice

Biol 3272 Applied Biostatistics
A-F only, 3 credit(s); High school algebra; 2003 recommended Credit will not be granted if credit has been received for BIOL 5272;
Instructor: Katagiri, Fumiaki
**Biol 3302 Leadership For Change**

**Description:** This course and final project are designed to synthesize the work students have completed during their participation in the Dean's Scholars program and throughout their undergraduate studies. Students will consider personal perspectives about leadership, citizenship, and change. By using students' previous experiences and perspectives, students will consider the leadership necessary for the 21st century, their previous and future growth as a leader, and their role in shaping the future. Different aspects of leadership will be explored, including individual strengths and weaknesses, leadership identity, and articulating a vision for and commitment to change.

**Style:** 50% Discussion, 50% Small Group Activities.

**Grading:** 59% special projects, 6% journal, 35% reflection paper.

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**Biol 3303 Peer Leadership Practicum**

**Description:** This course is designed for students who are participating as Peer Mentors in the CBS Dean's Scholars program. The course prepares students for their role as a Dean's Scholars Peer Mentor through learning how to assist first-year students in a successful transition to college. Through reflective activities, group activities, and class discussion, students will explore how their personal experiences influence their understanding, practices, and effectiveness as a Peer Mentor. The course also offers a learning laboratory for students to reflect and discuss the various aspects of the leadership experience with a community of fellow leaders.

**Style:** 50% Discussion, 50% Small Group Activities.

**Grading:** 38% journal, 25% reflection paper, 9% in-class presentation, 28% class participation.

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**Biol 3311 Molecular Genetics**

**Description:** Student may contact the instructor or department for information.

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**Biol 3312 Molecular Genetics**

**Description:** Student may contact the instructor or department for information.

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**Biol 3313 Molecular Genetics**

**Description:** Student may contact the instructor or department for information.

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**Biol 3314 Molecular Genetics**

**Description:** Student may contact the instructor or department for information.
major societal and scientific issues, including those related to human impacts on the functioning, productivity and sustainability of ecosystems at a global scale; and the process of scientific creativity, including hypothesis generation, the design of experiments and observation, critical evaluation of data, the inferences that can be drawn from data, and the implications of these inferences. Laboratory and discussion sections will be led by a teaching assistant (TA) from the Ecology Graduate Program. These sections will illustrate, amplify and explain ecological concepts. Your laboratory experience will include completion of an independent research project. Lecture material, assigned readings from the text, and the scientific papers discussed in both lecture and laboratory form the basis of all examination questions.

**Biol 3409 Evolution**

3 credit(s); One semester college biology  
Credit will not be granted if credit has been received for: BIOL 5409;  
Instructor: Zink, Robert Martin  
Description: This course presents an overview of the biology of evolutionary change. After a brief review of the history of thought in evolutionary biology, genetic mechanisms of evolution change are presented, including mutation and recombination, natural selection and genetic drift. Population genetics and molecular evolution are explored in depth. Examples of macroevolution are presented including adaptation by natural selection, sexual selection, speciation, species concepts and extinction. Human health is used to illustrate the adaptive ability of microorganisms, and we also touch on the evolution of aging.

**Biol 3411 Introduction to Animal Behavior**

3 credit(s); One semester college biology  
Credit will not be granted if credit has been received for: BIOL 3811;  
Instructor: Bee, Mark Allen  
Description: This course introduces the biological study of behavior. Although students from all disciplines are welcome, it is one of three core courses for undergraduate majors in EEB. About half of the course is taught in lecture form, and half in the laboratory. The course covers mechanisms in behavior, including behavior genetics, hormonal and neural mechanisms. The course emphasizes an evolutionary approach to behavior, outlining ideas about feeding, social and reproductive behavior, mating systems, altruism, communication and other contemporary issues in behavioral biology. Laboratory exercises stress experimental approaches to hypothesis testing and involve work with real animals. Students will spend several weeks at the end of the semester conducting an independent project.  
Style: 40% Lecture, 60% Laboratory.  
Grading: 20% mid exam, 20% final exam, 13% special projects, 13% class participation, 34% laboratory evaluation.  
Exam Format: Multiple choice, short answer and short essay.

**Biol 3503 Biology of Aging**

2 credit(s);  
Instructor: Curtsinger, James W  
Description: The biology of aging is an integrative discipline, encompassing studies of molecules, genes, cells, tissues, organs, organisms, and populations. In this course we will examine several general areas of research on aging in both humans and model experimental systems, including age-related changes in populations, age-related changes in individuals, genes that influence aging, cellular mechanisms, evolution of senescence, interventions to slow aging, and future prospects for human societies. The course is intended for undergraduates who have completed a college-level course in general biology.  
Style: 80% Lecture, 15% Discussion, 5% Guest Speakers. Expect to spend about 4 hours per week out of class on reading assignments and notebooks.  
Grading: 80% quizzes, 20% written homework. Extra credit for reading optional papers and entering in notebooks.  
Exam Format: Mixture of multiple choice, problem, and short essay.

**Biol 3600 Directed Instruction**

S-N only, 1-2 credit(s), max credits 6, 6 completions allowed;  
Instructor: Hanna, Kathryn L  
Description: This course allows students to gain experience in organizing, leading and evaluating a small group of students by becoming a Student Leader for the Biology Colloquium class (Biol 1020). Biology Colloquium Student leaders attend the weekly Biology Colloquium class and Student Leader meetings, set up small-group tours, evaluate student journals and tours, and hold office
hours. About 6 hours a week are involved during the semester. Prior to the beginning of the semester, a training/orientation session is required and two Student Leader group meetings are held throughout the semester. To be eligible to be a Student Leader, students need to have been completed two semester of the Biology Colloquium class (Biol 1020) and be in satisfactory progress within their degree objectives. An application is required and is available at http://biosci.cbs.umn.edu/bcq or from the instructor.

**Style:** Must attend all class sessions of a Biol 1020 section.

**Biol 3610 Internship: Professional Experience in Biological Sciences**

S-N only, 1 credit(s), max credits 6, 6 completions allowed;

**Instructor:** Hanna,Kathryn L

**Description:** Undergraduate students can earn credit for a structured internship that matches their academic and/or career goals in life science with off-campus learning opportunities. Biological sciences internships in industry, non-profit organizations, and government agencies may be found through the Career Center for Science and Engineering (50 Lind Hall, Minneapolis Campus). The number of credits is variable and will be based on time spent on-site and other course requirements. Students must commit to a minimum of 10 hours/week/semester (at least 150 hours). Students will submit a Learning Agreement Form developed in consultation with the on-site internship supervisor and the faculty instructor. Students must meet individually with the instructor in order to register for credit. If a student has questions about a specific internship opportunity, contact the instructor at khanna@umn.edu. Examples of organizations that have hosted internship students include, Hennepin County Medical Center, Minnesota Zoo, MN Bureau of Criminal Apprehension, MN Dept. of Natural Resources, Medtronic, Medtox, Wildlife Rehabilitation Center, and many, many other organizations.

**Style:** Interns will meet as a group for 2 or 3 evening sessions, TBA.

**Grading:** 100% other evaluation. Students are required to keep a weekly journal and write a final reflective paper. Beyond one credit, students may help select the type of assignments that enable them to enhance their internship experience. S/N grading only.

**Biol 3700 Undergraduate Seminar: Nature of Science and Research**

S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;

**Instructor:** Phillips,Jane Ann

**Description:** "Somewhere, something incredible is waiting to be known." Carl Sagan. This course is specifically designed for new transfer students to CBS, but is open to other upper division students as well. In this course, students will explore the nature of research with the ultimate goal of getting into a research project and experiencing the excitement of real science. Specific course goals include o Learning about CBS and the U of MN o Learning about the research enterprise o Becoming familiar with University resources (e.g., libraries, University research facilities, administrative support facilities, others) that support research o Learning how to read research papers o Exploring the ethics of research o Preparing for your research experience, from finding a mentor to having your safety training, lab skills in order. In the Fall of 2012, there will be multiple sections of this topic offered, each covering the same topics but viewed from a different research viewpoint (e.g., stem cell research, genomics research, cancer research.)

**Style:** 80% Discussion, 10% Field Trips, 10% Guest Speakers.

**Grading:** 25% reports/papers, 25% reflection paper, 50% in-class presentation. Absences will be counted against the in-class participation points since you cannot participate if you are not there.

**Biol 3700 Undergraduate Seminar: Nature of Science and Research**

S-N only, 1 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Phillips,Jane Ann

**Description:** "Somewhere, something incredible is waiting to be known." Carl Sagan. This course is specifically designed for new transfer students to CBS, but is open to other upper division students as well. In this course, students will explore the nature of research with the ultimate goal of getting into a research project and experiencing the excitement of real science. Specific course goals include o Learning about CBS and the U of MN o Learning about the research enterprise o Becoming familiar with University resources (e.g., libraries, University research facilities, administrative support facilities, others) that support research o Learning how to read research papers o Exploring the ethics of research o Preparing for your research experience, from finding a mentor to having your safety training, lab skills in order. In the Fall of 2012, there will be multiple sections of this topic offered, each covering the same topics but viewed from a different research viewpoint (e.g., stem cell research, genomics research, cancer research.)

**Style:** 80% Discussion, 10% Field Trips, 10% Guest Speakers.

**Grading:** 25% reports/papers, 25% reflection paper, 50% in-class presentation. Absences will be counted against the in-class participation points since you cannot participate if you are not there.

**Biol 3700 Undergraduate Seminar: Directed Instruction in the Classroom**

S-N only, 1 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Rougvie,Ann E

**Description:** Student may contact the instructor or department for information.

**Biol 3700 Undergraduate Seminar: Nature of Science and Research**

S-N only, 1 credit(s), max credits 9, 3 completions allowed;
Instructor: James, Brittni J
Description: "Somewhere, something incredible is waiting to be known." Carl Sagan. This course is specifically designed for new transfer students to CBS, but is open to other upper division students as well. In this course, students will explore the nature of research with the ultimate goal of getting into a research project and experiencing the excitement of real science. Specific course goals include: Learning about CBS and the U of MN o Learning about the research enterprise o Becoming familiar with University resources (e.g., libraries, University research facilities, administrative support facilities, others) that support research o Learning how to read research papers o Exploring the ethics of research o Preparing for your research experience, from finding a mentor to having your safety training, lab skills in order. In the Fall of 2012, there will be multiple sections of this topic offered, each covering the same topics but viewed from a different research viewpoint (e.g., stem cell research, genomics research, cancer research.)
Style: 80% Discussion, 10% Field Trips, 10% Guest Speakers.
Grading: 25% reports/papers, 25% reflection paper, 50% in-class presentation. Absences will be counted against the in-class participation points since you cannot participate if you are not there.

Biol 3700 Undergraduate Seminar: Nature of Science and Research
S-N only, 1 credit(s), max credits 9, 3 completions allowed;
Instructor: Ameen, Mohamed Abdinoor
Description: "Somewhere, something incredible is waiting to be known." Carl Sagan. This course is specifically designed for new transfer students to CBS, but is open to other upper division students as well. In this course, students will explore the nature of research with the ultimate goal of getting into a research project and experiencing the excitement of real science. Specific course goals include: Learning about CBS and the U of MN o Learning about the research enterprise o Becoming familiar with University resources (e.g., libraries, University research facilities, administrative support facilities, others) that support research o Learning how to read research papers o Exploring the ethics of research o Preparing for your research experience, from finding a mentor to having your safety training, lab skills in order. In the Fall of 2012, there will be multiple sections of this topic offered, each covering the same topics but viewed from a different research viewpoint (e.g., stem cell research, genomics research, cancer research.)
Style: 80% Discussion, 10% Field Trips, 10% Guest Speakers.
Grading: 25% reports/papers, 25% reflection paper, 50% in-class presentation. Absences will be counted against the in-class participation points since you cannot participate if you are not there.

Biol 3960H Communicating in the Biological Sciences
A-F only, 1 credit(s);
Instructor: Marks, M David
Description: Student may contact the instructor or department for information.

Biol 3960H Communicating in the Biological Sciences
A-F only, 1 credit(s);
Instructor: Wick, Susan M
Description: The class examines attributes of successful oral communication in science. Each student presents a 15-minute talk on some aspect of biology as it relates to society. The talk is videotaped, other class members and the instructor provide feedback on the presentation, and the student writes an analysis of the presentation and a self-assessment relative to the comments made by others.

Biol 4003 Genetics 3 credit(s);[[BIOC 3021 or BIOC 4331], [any CBS major or major in [animal science or applied plant science or BA biology or BA microbiology or nutrition or physiology or biology/society/environment] or Grad MBS major]] or instr consentCredit will not be granted if credit has been received for: GCD 3022;
Instructor: Brooker, Robert James
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Group work is emphasized. Visit "Class URL" for ODL policy, fee, and financial aid restrictions. This course is intended to provide you with a broad understanding of genetics. In the first part of the course you will explore the structure, replication, and expression of the genetic material known as deoxyribonucleic acid (DNA). As you examine DNA, you will gain an understanding of the molecular structure of DNA and its organization into units called genes. The next part of the course emphasizes inheritance patterns. In it, you will examine many types of inheritance patterns, including simple Mendelian inheritance, extra-chromosomal inheritance, linkage, and the quantitative traits that are determined by multiple genes. The last part of the course examines the genetic technologies that are used to analyze the genetic compositions of species and have applications in our everyday lives. This course ends with a consideration of genetics at the level of populations, and how the genetic compositions of populations evolve over time.
Style: Online with handwritten exams
Grading: 21% final exam, 27% special projects, 40% quizzes, 12% problem solving.
Exam Format: Supervised, in-person (not online) exams
3 credit(s);[[BIOC 3021 or BIOC 4331], [any CBS major or major in [animal science or applied plant science or BA biology or BA microbiology or nutrition or physiology or biology/society/environment] or Grad MBS major]] or instr consent Credit will not be granted if credit has been received for: GCD 3022;

Instructor: Glazebrook, Jane
Description: This is a survey course in Genetics that is aimed at junior and senior undergraduates majoring in the biological sciences. For most students who take this class, it is a required course. Other students are most welcome to participate. The course consists of lectures, including some web-based animations illustrating important concepts. Students participate in solving practice problems in class, and such class participation is worth up to 10% of the course grade. A basic understanding of probability and biochemistry is essential for successful learning, as is a dedication to solving practice problems. In Fall 2012, we will use a new textbook, Genetics: Analysis of Genes and Genomes, by Hartl and Ruvolo. We will begin with DNA, followed by transmission genetics, chromosomes, bacterial genetics, molecular genetics, control of gene expression, genomics and genetic engineering, population genetics, and human evolutionary genetics.

Style: 100% Lecture.

Grading: 70% mid exam, 30% final exam.

Exam Format: Multiple choice, short answers and problems

Biol 4003 Genetics

3 credit(s);[[BIOC 3021 or BIOC 4331], [any CBS major or major in [animal science or applied plant science or BA biology or BA microbiology or nutrition or physiology or biology/society/environment] or Grad MBS major]] or instr consent Credit will not be granted if credit has been received for: GCD 3022;

Instructor: Shima, Naoko
Description: Course Structure: The course consists of four approximately equal units: (I) Mendelian Genetics, (II) Molecular Genetics, (III) Genetics of Biological Processes, and (IV) Applied and Quantitative Genetics. All four units will emphasize the analysis of experiments and problem solving. Text: Genetics: Analysis & Principles 4th Edition by Robert J. Brooker (McGraw-Hill)

Style: 90% Lecture, 10% Discussion.

Grading: 68% mid exam, 22% final exam, 10% class participation.

Exam Format: Combination of multiple choice and short-answer questions

Biol 4004 Cell Biology

3 credit(s);

Instructor: Norrander PhD, Jan Marie
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit ‘Class URL’ for ODL policies, including fee and financial aid information. Focus on cell structure and the fundamental processes carried out by cells, with emphasis on eukaryotic animal cells. Methods used to study cells, membrane structure and transport, intracellular compartments and protein sorting, intracellular vesicular traffic, cell communication, the cytoskeleton, cell junctions and adhesion, the extracellular matrix, the cell cycle, apoptosis and cancer.

Style: Online with handwritten exams.

Grading: 15% quizzes, 15% problem solving. Discussions (10%) Exams (60%)

Exam Format: Supervised, in-person (not online) exams.

Biol 4004 Cell Biology

3 credit(s);

Instructor: Brambl, Robert Morgan
Description: Student may contact the instructor or department for information.

Biol 4004 Cell Biology

3 credit(s);

Instructor: Clarke, Duncan John

Style: 80% Lecture, 20% Discussion.
Grading: 60% mid exam, 20% final exam, 20% quizzes.

Biol 4004 Cell Biology
3 credit(s);
Instructor: Chen,Lihsia
Style: 80% Lecture, 20% Discussion.
Grading: 60% mid exam, 20% final exam, 20% quizzes.

Biol 4004 Cell Biology
3 credit(s);
Instructor: Matthes,David J
Description: This course focuses on structures and processes fundamental to cells. We emphasize eukaryotic animal cells. In particular we will discuss molecular and cellular research methods, assembly/function of membranes and organelles, cell division, cell form/movement, intercellular communication, transport, secretion pathways and stem cells & stem cell technology. This course has a strong problem-solving emphasis.
Style: 70% Lecture, 25% Discussion, 5% Guest Speakers.
Grading: 50% mid exam, 25% final exam, 10% class participation, 15% problem solving.
Exam Format: Multiple choice, short answer, essay

Biol 4201 Teaching in the Biology Laboratory
S-N only, 1 credit(s), max credits 2;
Instructor: Scott,Cheryl L
Description: Student may contact the instructor or department for information.

Biol 4201 Teaching in the Biology Laboratory
S-N only, 1 credit(s), max credits 2;
Instructor: Cotner,Sehoya H
Description: Student may contact the instructor or department for information.

Biol 4312 Advanced Topics in Molecular and Cellular Biology and Genetics
A-F only, 4 credit(s);
Instructor: Metzger,Kelsey Jean
Description: Student may contact the instructor or department for information.

Biol 4793W Directed Studies: Writing Intensive
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;Meets CLE req of Writing Intensive
Instructor: Wick,Susan M
Description: Student may contact the instructor or department for information.

Biol 4794W Directed Research
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;Meets CLE req of Writing Intensive
Instructor: Wick,Susan M
Description: Student may contact the instructor or department for information.

Biol 4960H Thesis Writing in the Biological Sciences: Developing the Literature Review
A-F only, 1 credit(s);
Instructor: Schiff,Leslie Ann
Description: Student may contact the instructor or department for information.

Biol 4994 Directed Research
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Starr,Tim
Description: Student may contact the instructor or department for information.

Biol 5272 Applied Biostatistics
Biol 5409 Evolution

Credit will not be granted if credit has been received for: BIOL 3409;

Instructor: Katagiri,Fumiaki

Description: PURPOSE: This course will introduce students to conceptual basis of statistical analysis, statistical analysis of biological data, statistical tools in the R environment, and basics of R programming through lectures and hands-on experience in computer lab. TOPICS: include R basics and programming, data visualization, probability distributions, significance tests, experimental design, linear model, simple and multiple regression, and general linear model. OUTCOMES: At the completion of this course, students will have acquired practical knowledge about how to design experiments for a higher statistical power, how to choose appropriate statistical analysis for particular data, how to apply particular statistical analysis, how to interpret the outcome of analysis, and how to program in R to do these tasks.

Style: 50% Lecture, 10% Discussion, 40% Laboratory. Laboratory means computer lab

Grading: 30% mid exam, 45% final exam, 15% written homework, 10% class participation.

Exam Format: problem solving on the computer

Biol 5309 Molecular Ecology And Ecological Genomics

Credit will not be granted if credit has been received for: BIOL 3409;

Instructor: Tiffin,Peter L

Description: Molecular Ecology and Ecological Genomics Molecular tools are offering new opportunities to understand ecological and evolutionary processes. Similarly, ecological and evolutionary models are providing a context for understanding the functional significance of variation in genes and genomes. This course will focus on the application of molecular tools in ecology and evolutionary ecology. This course will introduce students to a wide variety of molecular techniques (PCR, sequencing, AFLP, SNPs, microsats, QTL mapping, marker development, etc.), will cover statistical approaches used to analyze molecular data, and explore how molecular approaches are providing new insights into many areas in evolutionary ecology (host-parasite interactions, microbial diversity, species range expansion, identifying genes responsible for ecological important variation, etc.). The course is aimed to provide students with the knowledge needed to evaluate their strengths and weaknesses of techniques and analyses as well as the types of questions molecular tools are being used to answer. The scope of topics to be covered will depend in part on the experience and interests of the students. The course will involve lectures, student presentations, and discussion of papers. There will be considerable opportunities for students to focus on areas of their interest.

Style: 50% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation.

Biol 5407 Ecology

Credit will not be granted if credit has been received for: EEB 3001;

Instructor: Tilman,David

Description: Biology 3407 is presented as a series of lectures, discussion sections, and laboratory exercises. The goal of this course is to help you explore: the scientific principles, concepts and theories that are the foundation of ecology; how these are applied to major societal and scientific issues, including those related to human impacts on the functioning, productivity and sustainability of ecosystems at a global scale; and the process of scientific creativity, including hypothesis generation, the design of experiments and observation, critical evaluation of data, the inferences that can be drawn from data, and the implications of these inferences. Laboratory and discussion sections will be led by a teaching assistant (TA) from the Ecology Graduate Program. These sections will illustrate, amplify and explain ecological concepts. Your laboratory experience will include completion of an independent research project.

Lecture material, assigned readings from the text, and the scientific papers discussed in both lecture and laboratory form the basis of all examination questions.

Biol 5409 Evolution

Credit will not be granted if credit has been received for: BIOL 3409;

Instructor: Zink,Robert Martin

Description: This course presents an overview of the biology of evolutionary change. After a brief review of the history of thought in evolutionary biology, genetic mechanisms of evolution change are presented, including mutation and recombination, natural selection and genetic drift. Population genetics and molecular evolution are explored in depth. Examples of macroevolution are presented including adaptation by natural selection, sexual selection, speciation, species concepts and extinction. Human health is used to illustrate the adaptive ability of microorganisms, and we also touch on the evolution of aging.

Biol 5409 Evolution

Credit will not be granted if credit has been received for: BIOL 3409;

Instructor: Curtsinger,James W

Description: This course presents an overview of the biology of evolutionary change. After a brief review of the history of thought in evolutionary biology, genetic mechanisms of evolution change are presented, including mutation and recombination, natural selection and genetic drift. Population genetics and molecular evolution are explored in depth. Examples of macroevolution are presented...
including adaptation by natural selection, sexual selection, speciation, species concepts and extinction. Human health is used to illustrate the adaptive ability of microorganisms, and we also touch on the evolution of aging.

Biol 5910 Special Topics in Biology for Teachers
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Wick,Susan M
Description: Student may contact the instructor or department for information.

Biol 6793 Directed Studies
1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Schottel,Janet L
Description: Student may contact the instructor or department for information.

Biol 6794 Directed Research
S-N only, 1-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Schottel,Janet L
Description: Student may contact the instructor or department for information.

Biol 6999 Capstone Project
S-N only, 2 credit(s);
Instructor: Schottel,Janet L
Description: Student may contact the instructor or department for information.

Biology, Society, and Environment

BSE 3996 Senior Project Directed Research
A-F only, 3-4 credit(s), max credits 8; instr consent , dept consent , college consent Credit will not be granted if credit has been received for: BSE 3996H;
Instructor: Squires,Roderick H
Description: Student may contact the instructor or department for information.

BSE 3996H Honors: Senior Project Directed Research
A-F only, 3-4 credit(s), max credits 8; instr consent , dept consent , college consent Credit will not be granted if credit has been received for: BSE 396;
Instructor: Squires,Roderick H
Description: Student may contact the instructor or department for information.

BSE 3997 Senior Project
A-F only, 2 credit(s), max credits 4; instr consent , dept consent , college consent Credit will not be granted if credit has been received for: BSE 3997H;
Instructor: Squires,Roderick H
Description: Student may contact the instructor or department for information.

BSE 3997H Honors: Senior Project
A-F only, 2 credit(s), max credits 4; instr consent dept consent college consent Credit will not be granted if credit has been received for: BSE 3997;
Instructor: Squires,Roderick H
Description: Student may contact the instructor or department for information.

Biomedical Engineering 7-105 Nils Hasselmo Hall

BMEn 1601 Biomedical Engineering Undergraduate Seminar I
1 credit(s);
Instructor: Tranquillo PhD,Robert T
Description: Student may contact the instructor or department for information.

BMEn 2401 Programming for Biomedical Engineers
BMEn 2501 Cellular and Molecular Biology for Biomedical Engineers
A-F only, 4 credit(s); Meets CLE req of Biological Sciences
Instructor: Sachs, Jonathan Nathaniel
Description: Tremendous advances in cellular and molecular biology over the last few decades have advanced the frontiers of medicine and biotechnology. Understanding the basic concepts of how cells and their molecules work is now an important tool for biomedical engineers and a new avenue for advancing medicine through technology. To use this tool requires not only an understanding of the fundamentals of cellular and molecular biology, but also the ability to relate these fundamentals to the physical sciences and mathematics. In doing so engineers can better understand, manipulate, and control cellular and molecular systems for therapy and technology.
Grading: 20% final exam, 10% reports/papers, 40% quizzes, 30% additional semester exams.

BMEn 3001 Biomechanics
A-F only, 4 credit(s);
Instructor: Hesla, Todd
Description: Student may contact the instructor or department for information.

BMEn 3201 Bioelectricity and Bioinstrumentation
A-F only, 4 credit(s);
Instructor: Ince, Nuri
Description: Student may contact the instructor or department for information.

BMEn 4001W Biomedical Engineering Design I
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ashkenazi, Shai
Description: This is the first course in a two-course series in design. The goal of this sequence is to develop design skills through the completion of a biomedical engineering design project. Through course lectures and exercises involving the design process, students will be exposed to all aspects of designing a new product from concept identification to building a working prototype. The projects are open-ended without a single "unique" solution. The student is supposed to learn the methodology of design. The course will amplify creativity through the group process. The course also trains students on determining consumer need. The writing portion of the course will enhance technical communication skills.

BMEn 4710 Directed Research
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Odde, David John
Description: Student may contact the instructor or department for information.

BMEn 4720 Directed Study
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Odde, David John
Description: Student may contact the instructor or department for information.

BMEn 4896 Industrial Assignment I: Co-op Program
A-F only, 2 credit(s);
Instructor: Odde, David John
Description: Student may contact the instructor or department for information.

BMEn 5001 Advanced Biomaterials
A-F only, 3 credit(s);
Instructor: Wang, Chun
Description: 1) An overview of the types of modern biomaterials and their applications 2) Understand biomaterial selection, design, and structure-function relationships 3) Understand the concept and evaluation of biocompatibility 4) Develop analytical and critical-thinking skills for the evaluation of research literature
Grading: 20% mid exam, 30% final exam, 20% reports/papers, 20% written homework, 10% class participation.
BMEn 5041 Tissue Engineering
3 credit(s);
Instructor: Bjork, Jason
Description: Student may contact the instructor or department for information.

BMEn 5201 Advanced Biomechanics
3 credit(s);
Instructor: Alford, Patrick William
Description: Student may contact the instructor or department for information.

BMEn 5351 Cell Engineering
3 credit(s);
Instructor: Odde, David John
Description: Many of the innovations that are occurring in medicine are based on advances in our understanding of fundamental cellular and molecular processes. "Cell Engineering" is the attempt to understand cellular and molecular processes in a quantitative and physically fundamental way, so that ultimately the behavior of cells can be controlled. The subject is sufficiently new that there is not an accepted textbook in the area. Therefore, I have chosen four topics for study this term. Many other areas were also considered, however in one semester it would not be possible to have much depth in any one area if many topics were included. The course will not cover electrophysiology, as it is covered in other university courses. Instead the focus will be on processes that are principally chemical and mechanical in nature. Neither will the course cover basic cell biology. The main approach will be to review original research papers from the literature to understand the motivation for the work, the approaches taken, the results gained, and their significance. The main goal of the course is to develop the ability to analyze cellular processes using a quantitative, physically based approach. In particular, students will be taught how to develop mathematical and computational models for cellular processes based on the fundamental physics and chemistry of the relevant molecular components.
Grading: 25% special projects, 50% quizzes, 20% written homework, 5% class participation.

BMEn 5411 Neural Engineering
3 credit(s);
Instructor: Netoff, Tay Ivan
Description: This course explores the fundamental theoretical basis for neural engineering in the context of past, present, and future applications. The course begins with an introduction to neuroanatomy and neurophysiology assuming students taking the course have little experience in neuroscience. Homework problems will be predominantly building models of neurons and measuring their response to stimulation. The theoretical topics will be taught to develop a deeper understanding and practical knowledge of neural engineering applications. The applications to be studied are arranged by technological maturity. Classical neural engineering subjects include electrode design, neural modeling, cochlear implants, and deep brain stimulation. Developing applications include prosthetic limbs, micturition control, and prosthetic vision. Future applications will cover brain machine interface, seizure prediction, optical imaging of the nervous system and place cell recordings in hippocampus. Students will also explore other advanced topics in their own 20 minute presentations at the end of the course.
Style: 70% Lecture, 20% Student Presentation, 10% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 20% written homework, 30% in-class presentation, 10% class participation.

BMEn 5501 Biology for Biomedical Engineers
3 credit(s);
Instructor: Sachs, Jonathan Nathaniel
Description: Tremendous advances in cellular and molecular biology over the last few decades have advanced the frontiers of medicine and biotechnology. Understanding the basic concepts of how cells and their molecules work is now an important tool for biomedical engineers and a new avenue for advancing medicine through technology. To use this tool requires not only an understanding of the fundamentals of cellular and molecular biology, but also the ability to relate these fundamentals to the physical sciences and mathematics. In doing so engineers can better understand, manipulate, and control cellular and molecular systems for therapy and technology.
Grading: 20% special projects, 80% quizzes.

BMEn 5910 Special Topics in Biomedical Engineering: Cancer Bioengineering
3 credit(s), max credits 6;
Instructor: Provenzano, Paolo
Description: Student may contact the instructor or department for information.

BMEn 8101 Biomedical Digital Signal Processing
A-F only, 3 credit(s);
Instructor: Lim, Hubert Hyungil
Description: Student may contact the instructor or department for information.

BMEn 8401 New Product Design and Business Development
A-F only, 4 credit(s); [CSE grad student or CSOM grad student], some design experience; 8401, 8402 must be taken same yr
Credit will not be granted if credit has been received for: ME 8221;
Instructor: Durfee, William K
Description: See the course web site for a complete description.

BMEn 8401 New Product Design and Business Development
A-F only, 4 credit(s); [CSE grad student or CSOM grad student], some design experience; 8401, 8402 must be taken same yr
Credit will not be granted if credit has been received for: ME 8221;
Instructor: Sapienza, Harry Jack
Description: See the course web site for a complete description.

BMEn 8501 Nonlinear Dynamics in Electrophysiology
A-F only, 3 credit(s);
Instructor: Talkachova, Alena
Style: 75% Lecture, 20% Student Presentation, 5% Guest Speakers.
Grading: 30% additional semester exams, 30% in-class presentation, 10% class participation, 30% problem solving.
Exam Format: Approximate dates for exams: October 21 and December 9. Subject to change.

BMEn 8502 Physiological Control Systems
A-F only, 3 credit(s);
Instructor: Johnson, Matthew Douglas
Description: Student may contact the instructor or department for information.

BMEn 8601 Biomedical Engineering Seminar
S-N only, 1 credit(s);
Instructor: Wang, Chun
Description: Student may contact the instructor or department for information.

BMEn 8710 Directed Research
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Barocas, Victor Howard
Description: Student may contact the instructor or department for information.

BMEn 8720 Internship in Biomedical Engineering
S-N only, 1-3 credit(s), max credits 6;
Instructor: Barocas, Victor Howard
Description: Student may contact the instructor or department for information.

BMEn 8820 Plan B Project
2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Barocas, Victor Howard
Description: Student may contact the instructor or department for information.
BMEn 8900 Special Topics in Biomedical Engineering: Molecular, Cellular, and Tissue Biomechanics
A-F only, 3 credit(s), max credits 8;
Instructor: Barocas, Victor Howard
Description: Student may contact the instructor or department for information.

BMEn 8910 Independent Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Barocas, Victor Howard
Description: Student may contact the instructor or department for information.

Biomedical Informatics and Computational Biology

BICB 8510 Computation and Biology
A-F only, 2 credit(s), max credits 4;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8920 BICB Colloquium
S-N only, 1 credit(s), max credits 2;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8930 BICB Journal Club
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8990 Seminar on Current Topics: Ethical Issues in Bioinformatics
1 credit(s), max credits 4, 4 completions allowed;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8990 Seminar on Current Topics: Ethical Issues in Bioinformatics
1 credit(s), max credits 4, 4 completions allowed;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8991 Independent Study
S-N only, 1-2 credit(s), max credits 4;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8991 Independent Study
S-N only, 1-2 credit(s), max credits 4;
Instructor: Georgopoulos, Apostolos P
Description: Student may contact the instructor or department for information.

BICB 8991 Independent Study
S-N only, 1-2 credit(s), max credits 4;
Instructor: Khodursky, Arkady B
Description: Student may contact the instructor or department for information.

BICB 8991 Independent Study
S-N only, 1-2 credit(s), max credits 4;
Instructor: Pankratz, Nathan Daniel
Description: Student may contact the instructor or department for information.
Biophysical Sciences  

**BPhy 5138 Research Seminar**  
S-N only, 1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Ritenour,Russell  
Description: Student may contact the instructor or department for information.

**BPhy 5170 Basic Radiological Physics**  
3 credit(s); instr consent Credit will not be granted if credit has been received for: TRAD 7170;  
Instructor: Gerbi PhD,Bruce John  
Description: Student may contact the instructor or department for information.

**BPhy 5171 Medical and Health Physics of Imaging I**  
3 credit(s); 5170 or instr consent Credit will not be granted if credit has been received for: TRAD 7171;  
Instructor: Ritenour,Russell  
Description: Student may contact the instructor or department for information.

**BPhy 5172 Radiation Biology**  
3 credit(s); 5170 or instr consent Credit will not be granted if credit has been received for: TRAD 7172;  
Instructor: Yuan MD,PhD,Jianling  
Description: Student may contact the instructor or department for information.

**BPhy 8149 Advanced Topics in Radiation Therapy Physics**  
A-F only, 2 credit(s);  
Instructor: Higgins,Patrick Dennis  
Description: Student may contact the instructor or department for information.

**BPhy 8293 Directed Study in Biophysical Sciences and Medical Physics**  
1-12 credit(s), max credits 12, 1 completion allowed;  
Instructor: Ritenour,Russell  
Description: Student may contact the instructor or department for information.

**BPhy 8294 Directed Research in Biophysical Sciences and Medical Physics**  
1-12 credit(s), max credits 12, 1 completion allowed;  
Instructor: Ritenour,Russell  
Description: Student may contact the instructor or department for information.

Bioproducts and Biosystems Engineering  

**BBE 1001 Bioproducts and Biosystems Engineering Orientation**  
S-N only, 1 credit(s);  
Instructor: Seavey,Robert Thomas  
Description: Student may contact the instructor or department for information.

**BBE 1002 Biorenewable Resources**  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
Instructor: STAFF  
Description: Develop an understanding of Biorenewable Resources, using wood and agriculture-based biomass for making various renewable, bio-based products. Environmental, technological, social, and economic implications of the use of these resources.

**BBE 1943W Freshman Seminar**  
3 credit(s); Meets CLE req of Technology and Society; meets CLE req of Writing Intensive  
Instructor: Seavey,Robert Thomas  
Description: Student may contact the instructor or department for information.

**BBE 2001 Mechanics and Structural Design**  
A-F only, 4 credit(s);
Instructor: Chaplin, Jonathan
Description: Fundamental treatment of statics, dynamics, and principles of structural design. Techniques for individual components, including trusses, beams, and columns. Using conventional lumber products, engineered wood products, and steel. Lab.

BBE 2001 Mechanics and Structural Design
A-F only, 4 credit(s);
Instructor: Chaplin, Jonathan
Description: Student may contact the instructor or department for information.

BBE 2002 Introduction to Engineering Design
A-F only, 3 credit(s);
Instructor: Nieber, John Little
Description: Student may contact the instructor or department for information.

BBE 2002 Introduction to Engineering Design
A-F only, 3 credit(s);
Instructor: Nieber, John Little
Description: Student may contact the instructor or department for information.

BBE 2001 Renewable Energy and the Environment
3 credit(s); Meets CLE req of Technology and Society
Instructor: Schmidt, David Roger
Description: Course Description: As a CLA technology and society elective, this 3 credit online course offered by the Bioproducts and Biosystems Department is designed to educate the student about the current energy climate and its environmental impact. BBE 2201 provides a broad overview and understanding of the energy needs and demands, various renewable energy technologies and their economic, environmental and societal implications. This is course designed specifically for students with ALL backgrounds and majors. Much of the material and content is scientific but our goal is to present it in a style which anyone can understand. Course Objectives: Make better consumers and citizens by increasing awareness and knowledge of energy and the relationship of energy to the environment as well as providing students with a working knowledge of the resources available on energy and energy resources. Course Delivery: Course will include approx. 30 online lessons. Most lessons will include a topic introduction by the instructor, a recorded video lecture by a topic expert (either a UMN faculty member, or industry representative), additional reading materials, a quiz based on the lesson materials, and other lesson specific assignments.
Style: Class is completely online and asynchronous. From past student: "This class is just an elective, but it's by far my favorite class of the semester. It's so interesting and fun to "go to class to". Great set up!"
Grading: 10% final exam, 10% reports/papers, 10% special projects, 35% quizzes, 35% reflection paper. Workload is reasonable according to student surveys.
Exam Format: All online.

BBE 3012 Transport in Biological Processes I
A-F only, 4 credit(s);
Instructor: Nieber, John Little
Description: Student may contact the instructor or department for information.

BBE 3012 Transport in Biological Processes I
A-F only, 4 credit(s);
Instructor: Nieber, John Little
Description: Student may contact the instructor or department for information.

BBE 3013 Engineering Principles of Molecular and Cellular Processes
A-F only, 3 credit(s);
Instructor: Barney, Brett M
Description: Student may contact the instructor or department for information.

BBE 3023 Ecological Engineering Principles
3 credit(s);
Instructor: Clanton, Chuck
Description: Conceptual outline/topics: 1) Soil physical properties; 2) Basic soil calculations; 3) Soil and land reference material; 4) Texture and particle size distribution; 5) Temperature and heat flow; 6) Soil development; 7) Soil moisture and moisture potential; 8)

**Style:** 60% Lecture, 15% Discussion, 25% Laboratory.

**Grading:** 40% final exam, 15% reports/papers, 30% quizzes, 15% laboratory evaluation.

**Exam Format:** Problems, short answer

BBE 3023 Ecological Engineering Principles
3 credit(s);
Instructor: Clanton, Chuck
Description: Student may contact the instructor or department for information.

BBE 3093 Directed Studies
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: STAFF
Description: Independent study of topic(s) involving physical principles as applied to agricultural production and land resources. Contact the department for information.

BBE 3101 Introductory Statics and Structures for Construction Management
A-F only, 3 credit(s);
Instructor: STAFF
Description: Statics, engineering wood design principles, mechanical properties of wood. Design techniques for individual components. Trusses, beams, columns. Using conventional lumber products, engineered wood products, and steel. Simple structures explored through examples, assignments.

BBE 3393 Directed Study
1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: STAFF
Description: Opportunity to pursue experience not available through independent study or extra credit. In consultation with an advisor students develop a prospectus and complete progress reports and a final report on the project.

BBE 3396 Industrial Internship (Industrial Assignment)
A-F only, 1 credit(s);
Instructor: STAFF
Description: Industrial work assignment in forest products cooperative education programs. Evaluation based on formal report written by student at end of each semester of work assignment.

BBE 3503 Marketing of Bio-based Products
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: BBE 5503;
Instructor: Smith, Tim
Description: Student may contact the instructor or department for information.

BBE 4001 Chemistry of Biomass and Biomass Conversion to Fuels and Products
A-F only, 4 credit(s); CHEM 2301 or instr consent Credit will not be granted if credit has been received for: BBE 5001; Meets CLE req of Environment
Instructor: Tschirner, Ulrike Waltrau
Description: The first half of this course is focused on fundamentals such as the chemical composition of plant materials and typical reactions. The topics covered include: Carbohydrate Chemistry, Cellulose, Hemicellulose, Lignin, distribution of chemical components in plant material, Extractives and Oils, Starch, Proteins including Enzymes, Alkaloids. The second part of this class is focused on chemical reactions involved in conversion of biomass to industrial products; it includes the new emerging field of biomass conversion to Bioenergy and Bioproducts and traditional processes such as production of rayon or papermaking fiber. Examples of chemical reactions involved in biorefining include: conversion of cellulose and hemicellulose to ethanol, furfural, PLA (Polylactic acid); conversion of oil to biodiesel; gasification of biomass followed by Fisher Tropsch conversion to fuels.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 30% final exam, 40% quizzes, 25% written homework, 5% class participation. Based on 6 quizzes, 6 homeworks, final exam
BBE 4023W Process Control and Instrumentation
A-F only, 3 credit(s); Upper div CSE or grad student
Credit will not be granted if credit has been received for: BBE 5023; Meets CLE req of Writing Intensive
Instructor: Janni, Kevin A
Description: Instrumentation and control equipment and systems for monitoring and studying biological systems. Course objectives are: 1) Introduce students to instrumentation terminology, performance characteristics, uncertainty analysis, calibration and data acquisition; 2) Have students simplify dynamic process models for analysis in the S-domain using Laplace Transforms, generate model transfer functions and classify the dynamic behavior of closed-loop process systems based on their time-domain, transfer function, and frequency-domain representations; 3) Introduce students to open-loop and closed-loop control terminology, principles and equipment; 4) Introduce students to Proportional-Integral-Derivative (PID) controllers; 5) Have students analyze control system stability and performance; 6) Have students understand practical control issues and the benefits of control engineering for improving operations, safety, and environmental compliance; 7) Introduce students to sensors and instruments to measure motion, pressure, strain and temperature; 8) Have students become familiar with the principles of sensors used in the measurement of mechanical, physical and chemical parameters; 9) Have students become familiar with PC-based data acquisition equipment and its use; 10) Have students integrate their instrumentation and process control knowledge in a comprehensive written design report that explains and recommends an instrumentation and process control system.
Style: 60% Lecture, 10% Discussion, 30% Laboratory.
Grading: 20% mid exam, 10% final exam, 35% reports/papers, 15% laboratory evaluation, 20% problem solving.
Exam Format: Matching, short problems, short answer

BBE 4023W Process Control and Instrumentation
A-F only, 3 credit(s); Upper div CSE or grad student
Credit will not be granted if credit has been received for: BBE 5023; Meets CLE req of Writing Intensive
Instructor: Janni, Kevin A
Description:

BBE 4401 Bioproducts Engineering
A-F only, 3 credit(s);
Instructor: Huang PhD, Huajiang
Description: Student may contact the instructor or department for information.

BBE 4403 Bio-based Products Engineering Lab II
A-F only, 1 credit(s); CHEM 2301, [jr or sr or instr consent ]
Credit will not be granted if credit has been received for: BBE 5403;
Instructor: Tschirner, Ulrike Waltrau
Description: Engineering principles as they apply to bio-based products; hands-on lab experiments including: chemical reaction kinetics, mass and energy balance during pulping, cellulose viscosity measurement, recycling of paper, flow through porous media (paper), liquid permeability, sizing test, drying (heat and mass transfer), production of composites product.
Style: 10% Lecture, 90% Laboratory.
Grading: 100% other evaluation. Based on work sheets, participation including team performance, open book final exam

BBE 4403 Bio-based Products Engineering Lab II
A-F only, 1 credit(s); CHEM 2301, [jr or sr or instr consent ]
Credit will not be granted if credit has been received for: BBE 5403;
Instructor: Tze, William Tai Yin
Description: Engineering principles as they apply to bio-based products; hands-on lab experiments including: chemical reaction kinetics, mass and energy balance during pulping, cellulose viscosity measurement, recycling of paper, flow through porous media (paper), liquid permeability, sizing test, drying (heat and mass transfer), production of composites product.
Style: 10% Lecture, 90% Laboratory.
Grading: 100% other evaluation. Based on work sheets, participation including team performance, open book final exam

BBE 4404 Biopolymers and Biocomposites Engineering
A-F only, 3 credit(s); [BBE/CSE upper division] or instr consent
Credit will not be granted if credit has been received for: BBE 5404;
Instructor: Tze, William Tai Yin
Description: This class provides students with an understanding of the structure and properties of biopolymers and the engineering of composites from these biopolymers and/or plant-based materials. Students will learn about the sources, synthesis, physico-chemical properties, applications, and degradation of biopolymers. They will also learn about the use of biopolymers and other plant-based biomaterials including cellulosic nanomaterials, agro-fibers, and wood for composites. Using principles of polymer science, mechanics, and adhesion, students will learn to engineer and predict properties of various bio-based composites including nanocomposites, biofiber-plastic composites, and adhesive-bonded laminated and particulate composite panels.
Style: 90% Lecture, 10% Laboratory.
Grading: 15% special projects, 5% quizzes, 20% problem solving. Three exams -- 20% each.
Exam Format: Short answers and calculations.

BBE 4407 Bioproducts: Manufacturing and Applications
3 credit(s); 1002 or instr consent Credit will not be granted if credit has been received for: BBE 5407;
Instructor: Espinoza, Omar A
Description: Student may contact the instructor or department for information.

BBE 4491 Senior Topics: Independent Study
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Independent study in an area of interest to an undergraduate majoring in one of the fields within the College of Food, Agricultural and Natural Resource Sciences.

BBE 4535 Assessment and Diagnosis of Impaired Waters
A-F only, 3 credit(s); Upper division CSE or CFANS or CBS student or instr consent Credit will not be granted if credit has been received for: BBE 5535;
Instructor: Magner, Joe
Description: This course was designed to prepare students to work in the water quality industry in the USA. The goal is to provide students with the background policy, models and field methods needed to prepare a TMDL. Students will learn about varying models and spend two Saturdays in the field discussing/collating data.
Style: 40% Lecture, 20% Student Presentation, 20% Field Trips, 20% Guest Speakers.
Grading: 30% final exam, 35% special projects, 25% written homework, 10% attendance.

BBE 4744 Engineering Principles for Biological Scientists
A-F only, 4 credit(s); [Math 1142 or Math 1271], Phys 1101; intended for non engineering students Credit will not be granted if credit has been received for: FSCN 4331;
Instructor: Morey, R Vance
Description: Intended for food and biological sciences students who are interested in understanding engineering principles applied to selected unit operations. Not intended for engineering students. Material and energy balances applied to processing systems. Principles of fluid flow, thermodynamics, heat and mass transfer applied to food and bioprocess unit operations such as pumping, heat exchange, refrigeration and freezing, drying, evaporation, and separation.
Style: 60% Lecture, 15% Discussion, 25% Laboratory.
Grading: 30% mid exam, 20% final exam, 10% quizzes, 25% laboratory evaluation, 15% problem solving.
Exam Format: Problems to work.

BBE 4744 Engineering Principles for Biological Scientists
A-F only, 4 credit(s); [Math 1142 or Math 1271], Phys 1101; intended for non engineering students Credit will not be granted if credit has been received for: FSCN 4331;
Instructor: Smith, David Eugene
Description: Student may contact the instructor or department for information.

BBE 4801H Honors Research
A-F only, 2 credit(s);
Instructor: STAFF
Description: First semester of independent research project supervised by faculty member.

BBE 4802H Honors Research
A-F only, 2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

BBE 4900 Intern Reports
S-N only, 2 credit(s), max credits 4;
Instructor: Janni, Kevin A
Description: Student exposure to engineering practice through an intern program. Periodic reports on work assignments are reviewed by faculty and coordinated with industry advisors.
BBE 4900 Intern Reports
S-N only, 2 credit(s), max credits 4;
Instructor: Tschirner, Ulrike Waltrau
Description: Student exposure to engineering practice through an intern program. Periodic reports on work assignments are reviewed by faculty and coordinated with industry advisors.

BBE 5001 Chemistry of Biomass and Biomass Conversion to Fuels and Products
A-F only, 4 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4001;
Instructor: Tschirner, Ulrike Waltrau
Description: The first half of this course is focused on fundamentals such as the chemical composition of plant materials and typical reactions. The topics covered include: Carbohydrate Chemistry, Cellulose, Hemicellulose, Lignin, distribution of chemical components in plant material, Extractives and Oils, Starch, Proteins including Enzymes, Alkaloids. The second part of this class is focused on chemical reactions involved in conversion of biomass to industrial products; it includes the new emerging field of biomass conversion to Bioenergy and Bioproducts and traditional processes such as production of rayon or papermaking fiber. Examples of chemical reactions involved in biorefining include: conversion of cellulose and hemicellulose to ethanol, furfural, PLA (Polylactic acid); conversion of oil to biodiesel; gasification of biomass followed by Fisher Tropsch conversion to fuels.
Style: 70% Lecture, 30% Discussion.
Grading: 100% other evaluation. Based on 6 quizzes, 6 homeworks, final exam

BBE 5023 Process Control and Instrumentation
3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4023W;
Instructor: Janni, Kevin A
Description: Instrumentation and control equipment and systems for monitoring and studying biological systems. Course objectives are: 1) Introduce students to instrumentation terminology, performance characteristics, uncertainty analysis, calibration and data acquisition; 2) Have students simplify dynamic process models for analysis in the S-domain using Laplace Transforms, generate model transfer functions and classify the dynamic behavior of closed-loop process systems based on their time-domain, transfer function, and frequency-domain representations; 3) Introduce students to open-loop and closed-loop control terminology, principles and equipment; 4) Introduce students to Proportional-Integral-Derivative (PID) controllers; 5) Have students analyze control system stability and performance; 6) Have students understand practical control issues and the benefits of control engineering for improving operations, safety, and environmental compliance; 7) Introduce students to sensors and instruments to measure motion, pressure, strain and temperature; 8) Have students become familiar with the principles of sensors used in the measurement of mechanical, physical and chemical parameters; 9) Have students become familiar with PC-based data acquisition equipment and its use; 10) Have students integrate their instrumentation and process control knowledge in a comprehensive written design report that explains and recommends an instrumentation and process control system.
Style: 60% Lecture, 10% Discussion, 30% Laboratory.
Grading: 20% mid exam, 10% final exam, 35% reports/papers, 15% laboratory evaluation, 20% problem solving.
Exam Format: Matching, short problems, short answer

BBE 5095 Special Problems
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: STAFF
Description: Advanced individual-study project. Application of engineering principles to specific problem. Student may contact the instructor or department for information.

BBE 5401 Bioproducts Engineering
A-F only, 3 credit(s);
Instructor: Huang PhD, Huajiang
Description: Student may contact the instructor or department for information.

BBE 5403 Bio-based Products Engineering Lab II
A-F only, 1 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4403;
Instructor: Tschirner, Ulrike Waltrau
Description: Engineering principles as they apply to bio-based products; hands-on lab experiments including: chemical reaction kinetics, mass and energy balance during pulping, cellulose viscosity measurement, recycling of paper, flow through porous media (paper), liquid permeability, sizing test, drying (heat and mass transfer), production of composites product.
Style: 10% Lecture, 90% Laboratory.
Grading: 100% other evaluation. Based on work sheets, participation including team performance, open book final exam
BBE 5403 Bio-based Products Engineering Lab II
A-F only, 1 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4403;
Instructor: Tze, William Tai Yin
Description: Engineering principles as they apply to bio-based products; hands-on lab experiments including: chemical reaction kinetics, mass and energy balance during pulping, cellulose viscosity measurement, recycling of paper, flow through porous media (paper), liquid permeability, sizing test, drying (heat and mass transfer), production of composites product.
Style: 10% Lecture, 90% Laboratory.
Grading: 100% other evaluation. Based on work sheets, participation including team performance, open book final exam

BBE 5404 Biopolymers and Biocomposites Engineering
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4404;
Instructor: Tze, William Tai Yin
Description: This class provides students with an understanding of the structure and properties of biopolymers and the engineering of composites from these biopolymers and/or plant-based materials. Students will learn about the sources, synthesis, physico-chemical properties, applications, and degradation of biopolymers. They will also learn about the use of biopolymers and other plant-based biomaterials including cellulosic nanomaterials, agro-fibers, and wood for composites. Using principles of polymer science, mechanics, and adhesion, students will learn to engineer and predict properties of various bio-based composites including nanocomposites, biofiber-plastic composites, and adhesive-bonded laminated and particulate composite panels.
Style: 90% Lecture, 10% Laboratory.
Grading: 15% special projects, 4% quizzes, 5% written homework, 16% problem solving. Three exams -- 20% each.
Exam Format: Short answers and calculations.

BBE 5407 Bioproducts: Manufacturing and Applications
3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4407;
Instructor: Espinoza, Omar A
Description: Student may contact the instructor or department for information.

BBE 5503 Marketing of Bio-based Products
A-F only, 4 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 3503;
Instructor: Smith, Tim
Description: Student may contact the instructor or department for information.

BBE 5513 Watershed Engineering
A-F only, 3 credit(s);
Instructor: Wilson, Bruce Nord
Description: Class URL: https://wiki.umn.edu/view/Wilson/WatershedEngineering Students will apply engineering principles in the management and design of hydrologic and surface water quality systems. Specific objectives are to understand and use: 1) Hydrologic analysis techniques for small watersheds; 2) Design techniques for small reservoirs and detention ponds for reducing peak flow rates and sediment concentrations; 3) Design techniques of surface water conveyance systems.
Style: 60% Lecture, 20% Laboratory, 15% Small Group Activities, 5% Field Trips.
Grading: 25% mid exam, 35% final exam, 25% special projects, 15% written homework.
Exam Format: Open book problems

BBE 5513 Watershed Engineering
A-F only, 3 credit(s);
Instructor: Wilson, Bruce Nord
Description: Application of engineering principles to managing surface runoff from agricultural, range, and urban watersheds. Design of facilities and selection of land use practices for controlling surface runoff to mitigate problems of flooding and degradation of surface-water quality.
Style: 60% Lecture, 20% Laboratory, 15% Small Group Activities, 5% Field Trips.
Grading: 25% mid exam, 35% final exam, 25% special projects, 15% problem solving.

BBE 5535 Assessment and Diagnosis of Impaired Waters
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4535;
Instructor: Magner, Joe
Description: This course was designed to prepare students to work in the water quality industry in the USA. The goal is to provide students with the background policy, models and field methods needed to prepare a TMDL. Students will learn about varying models and spend two Saturdays in the field discussing/collecting data.
Style: 40% Lecture, 20% Student Presentation, 20% Field Trips, 20% Guest Speakers.
Grading: 30% final exam, 35% special projects, 25% written homework, 10% attendance.

BBE 8001 Seminar I
A-F only, 1 credit(s);
Instructor: Sarkanen, Simo
Description: Student may contact the instructor or department for information.

BBE 8300 Research Problems
1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

BBE 8703 Managing Water in Food and Biological Systems
3 credit(s);
Instructor: Ruan PhD, R. Roger
Description: Student may contact the instructor or department for information.

Business Administration 2-190 Hanson Hall

BA 3000 Career Skills
S-N only, 1 credit(s);
Instructor: STAFF
Description: The focus of this course is to increase your awareness, knowledge and skills associated with the career and job search process. The course includes career discovery, but is mainly focused on the tactical pieces of a job search. You will be exposed to a variety of individuals who will give you different perspectives on the process, such as recruiters from local organizations and students who have completed an internship. You will learn to write a professional resume and cover letter, complete behavior-based interviews, research companies and positions, conduct an informational interview, and use the Undergraduate Business Career Center and The Edge. This development will increase your ability to undertake a successful career and job search now and in the future.
Style: 35% Lecture, 50% Discussion. guest speakers
Grading: 90% reports/papers, 10% class participation.

BA 3999 Internship Seminar
S-N only, 1 credit(s);
Instructor: Kinross-Wright, Morgan Elise
Description: BA 3999 is a one-credit independent study course for students who want or need to gain a credit with an internship. You can take it during your internship or the semester following the internship. The course consists of a meeting with the instructor during the semester and several short assignments designed to help you with the next phase of your career development. If you would like to take the class, you will need to fill out an "Internship documentation form" available at the UBCC front desk in 2-180 Hanson Hall, have your internship supervisor (and yourself) sign it, and bring it back or fax it back to Morgan Kinross-Wright in the UBCC. At that time you will be given permission to register. International students must also visit ISSS for information and paperwork related to CPT.

BA 4501 Carlson Funds Enterprise: Growth
OPT No Aud, 3 credit(s), max credits 6;
Instructor: Frank, Murray Z
Description: Student may contact the instructor or department for information.

BA 4502 Carlson Funds Enterprise: Fixed Income
OPT No Aud, 3 credit(s), max credits 6;
Instructor: Goldstein, Robert S
Description: Student may contact the instructor or department for information.

BA 4503 Carlson Ventures Enterprise
OPT No Aud, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: Nord, Tobin Lawrence
Description: Student may contact the instructor or department for information.

BA 4504 Carlson Consulting Enterprise
OPT No Aud, 3 credit(s), max credits 6;
Instructor: Gisser,Sarah Smith  
Description: Student may contact the instructor or department for information.

BA 4505 Brand Enterprise  
OPT No Aud, 3 credit(s), max credits 6;  
Instructor: Hopkins,David K  
Description: Student may contact the instructor or department for information.

BA 4990H Honors Thesis Seminar I  
A-F only, 2 credit(s);  
Instructor: Manchester,Colleen Flaherty  
Description: This course will provide you with a foundation for how to conduct individually-pursed research and is designed to support students writing their honors thesis. This course begins with you identifying and motivating an individually-chosen research question, progresses through an annotated bibliography, literature review, and study design, and ends with a research proposal that combines these pieces. This proposal will be used to inform your research methods and analysis as well as helping you to match with a faculty supervisor. The goal is to use this class to develop the foundation for your thesis in order for you to advance your methodology (e.g., dataset construction, interviews, surveys) during the first part of your senior year.

Business Law  3-110 Carlson School of Management

BLaw 3058 The Law of Contracts and Agency  
A-F only, 4 credit(s);  
Instructor: Kramer,Jack  
Description: First third of the course covers contracts and sales using the Socratic method of case analysis, much like a law school approach. Remainder of the course covers the law of warranties, product liability, negotiable instruments, real estate, wills and estates, agency, equal opportunity in employment law, secured transactions, and law relating to public companies and corporate governance.  
Grading: 30% final exam, 60% additional semester exams, 10% class participation.  
Exam Format: Mostly multiple choice. Also, short answer questions based on law school-type hypos.

Center for Allied Health Programs  15-194 PWB (MMC 714)

CAHP 5110 Foundations of Interprofessional Communication and Collaboration  
S-N only, 1 credit(s);  
Instructor: Spannaus-Martin,Donna J  
Description: Student may contact the instructor or department for information.

Center for Learning Innovation

CLI 1196 National Student Exchange: Plan A  
S-N only, 0 credit(s), 3 completions allowed;  
Instructor: Weber,Kendra A.  
Description: Student may contact the instructor or department for information.

CLI 1296 National Student Exchange: Plan B  
S-N only, 0 credit(s), 3 completions allowed;  
Instructor: Weber,Kendra A.  
Description: Student may contact the instructor or department for information.

CLI 1393 Directed Study  
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Furness,Ryan C  
Description: Student may contact the instructor or department for information.

CLI 1393 Directed Study  
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Henderson Vazquez,Teresa A  
Description: Student may contact the instructor or department for information.
CLI 1393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Muthyala,Rajeev S.
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Fridgen,Michael William
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Grabau,Jade
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Buehler,Emily Marie
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Hooke,Jennifer
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Weber,Kendra A.
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Wallenfeldt,Leslie Renee
Description: Student may contact the instructor or department for information.

CLI 2711 Career Development I
S-N only, 1 credit(s);
Instructor: Telander,Parry J
Description: Student may contact the instructor or department for information.

CLI 2711 Career Development I
S-N only, 1 credit(s);
Instructor: Brown,Maria L.
Description: Student may contact the instructor or department for information.

CLI 2711 Career Development I
S-N only, 1 credit(s);
Instructor: Walker,Laura
Description: Student may contact the instructor or department for information.

CLI 3390 Undergraduate Seminar
S-N only, 1 credit(s);
Instructor: Wacek,Jennifer A
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Furness, Ryan C
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Wacek, Jennifer A
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Bruenger, Aaron Michael
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Dingel, Molly J.
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Muthyala, Rajeev S.
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ford, James Thomas
Description: Student may contact the instructor or department for information.

CLI 3394 Directed Research
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

CLI 3394 Directed Research
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Metzger, Kelsey Jean
Description: Student may contact the instructor or department for information.

CLI 3394 Directed Research
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Prat-Resina, Xavier
Description: Student may contact the instructor or department for information.

CLI 3394 Directed Research
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Muthyala, Rajeev S.
Description: Student may contact the instructor or department for information.

CLI 3711 Leadership and Development I: A Journey in Journalism
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: McGill, Douglas Cornish
Description: Student may contact the instructor or department for information.

CLI 3711 Leadership and Development I: Admission Test Preparation - PCAT
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.
CLI 3711 Leadership and Development I: Admission Test Preparation - GRE and Other
  S-N only, 1 credit(s), max credits 4, 4 completions allowed;
  Instructor: Dunbar, Robert Lee
  Description: Student may contact the instructor or department for information.

CLI 3711 Leadership and Development I: Admission Test Preparation - MCAT
  S-N only, 1 credit(s), max credits 4, 4 completions allowed;
  Instructor: Dunbar, Robert Lee
  Description: Student may contact the instructor or department for information.

CLI 3711 Leadership and Development I: Professional Reflective Writing
  S-N only, 1 credit(s), max credits 4, 4 completions allowed;
  Instructor: Taniguchi, Yuko
  Description: Student may contact the instructor or department for information.

CLI 3712 Leadership and Development II
  S-N only, 1 credit(s);
  Instructor: Hegland, Jennifer Jean
  Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Sage PhD, Starr Kelly
  Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Aryal, Bijaya
  Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Dingel, Molly J.
  Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Huq, Aminul
  Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Nichols, Marcia Dawn
  Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Brewer, Cameron David
  Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
  Instructor: Sage PhD, Starr Kelly
  Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
  S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Prat-Resina, Xavier
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Dingel, Molly J.
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Laborde, Rebecca R
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Brewer, Cameron David
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Collie, Rachael Margaret
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Sage PhD, Starr Kelly
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Taniguchi, Yuko
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Hegland, Jennifer Jean
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Metzger, Kelsey Jean
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Aryal, Bijaya
Description: Student may contact the instructor or department for information.
CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Prat-Resina, Xavier
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Dingel, Molly J.
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Muthyala, Rajeev S.
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Huq, Aminul
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Nichols, Marcia Dawn
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Laborde, Rebecca R
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Collie, Rachael Margaret
Description: Student may contact the instructor or department for information.

CLI 4713 Capstone Reflections I and II
S-N only, 2 credit(s);
Instructor: Hegland, Jennifer Jean
Description: Student may contact the instructor or department for information.

CLI 4896 Capstone Certificate in Health Professions
6-15 credit(s), max credits 30;
Instructor: Hegland, Jennifer Jean
Description: Student may contact the instructor or department for information.

Center for Spirituality and Healing  Mayo Code 505; C592 Mayo

CSpH 1001 Principles of Holistic Health and Healing
2 credit(s);
Instructor: Brady, Linda J
Description: This course focuses on how individuals and society can work for a balanced life to achieve optimal health with our stressful lifestyles. Topics include: 1. what is health and well being? 2. cultural constructs of health and well being; 3. fundamental
principles and proven measures of holistic health that promote health and well being; 4. practical application and integration of holistic health practices into daily personal life. Class will be interactive and students will reflect on the application of the principles to their daily lives; a key component of class is to become more mindful and "present" in our daily lives and then to understand how we can apply this to be more balanced as students in US society. Students will be able to choose an in class or online option. All students will complete an assignment each week to reflect on the topic, but students who choose the online option will complete a second written assignment to makeup for what was missed in class. Students who choose to attend class will need to agree to mutually derived class rules (e.g. cell phones off, no multi-tasking).

**Style:** 50% Lecture, 50% Discussion. Most classes will present information and students will discuss/reflect on it in class groups. Students who choose not to attend class will need to complete an additional assignment to make up for class points.

**Grading:** 67% reflection paper, 33% class participation. Students will read or watch a video and reflect on the significance of the material. The expectation for class is that students sit up front, put away electronics, and participate fully.

**Exam Format:** No exams

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**CSpH 3101 Creating Ecosystems of Well-Being**

2 credit(s);  
**Instructor:** Hathaway, Kate M  
**Description:** Student may contact the instructor or department for information.

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**CSpH 3201 Introduction to Mindfulness-Based Stress Reduction**

2 credit(s);  
**Instructor:** Storlie, Erik Fraser  
**Description:** The class will introduce students to a variety of techniques by which the stress endemic in a fast-paced competitive culture can be both reduced, as well as worked with constructively. Students will engage in both experiential and intellectual learning. They will practice and apply techniques of stress-reduction through "mindfulness" - the steady, intentional gathering of a non-judgmental awareness into the present moment in various activities. They will also think critically as they study and evaluate recent medical-scientific literature on the physiological and psychological elements in the stress response.

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**CSpH 3301 Food Choices: Healing the Earth, Healing Ourselves**

3 credit(s); Credit will not be granted if credit has been received for: FSCN 3301;  
**Instructor:** Brady, Linda J  
**Description:** Food production in our current industrial system feeds the world, but at a cost to the environment. In nutrition we often talk about a healthy diet, but only occasionally do we link our food and diet choices to agricultural practices and the health of the planet. This class will link the concepts of human health and planetary health in terms of food. There are no prerequisites to the class, but you should have been exposed to critical reading, writing, and thinking to make your journey through this class more fulfilling. Using the framework of complexity theory and gentle action, topics that we will cover include: human food/nutrition needs and food security, influences on our food choices and decisions, cultural and personal context of food choices, ways that food is produced-farm to fork, especially industrial monoculture, food choices and the earth's bio diversity, land use, water use and pollution, energy needs, climate change, alternatives-organic and sustainable, fair trade and economic policies and choices, global tradeoffs. Class is totally online, although several videos will be scheduled in the evening for easy student access (students could also view these by purchase or rental). This class works best for students who are self motivated and organized and who are comfortable reading, analyzing, and using data to backup their own opinions.  
**Style:** 100% Web Based.  
**Grading:** 50% written homework, 50% reflection paper.

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**CSpH 5000 Explorations in Complementary Therapies and Healing Practices: Spiritual Aspects of Palliative Care / Lifespan**

2 credit(s), max credits 12, 4 completions allowed;  
**Instructor:** O'Conner-Von PhD, Susan K.  
**Description:** Student may contact the instructor or department for information.

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**CSpH 5101 Introduction to Integrative Healing Practices**

3 credit(s);  
**Instructor:** Culliton, Patricia D  
**Description:** Student may contact the instructor or department for information.

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**CSpH 5102 Art of Healing: Self as Healer**

1 credit(s);  
**Instructor:** Culliton, Patricia D  
**Description:** Student may contact the instructor or department for information.
CSpH 5102 Art of Healing: Self as Healer  
1 credit(s);  
Instructor: Gorman, Rebecca Sue  
Description: CSpH 5102 - Art of Healing: Self as Healer (1.0 cr; Prereq-Jr or sr or grad student or #; fall, spring, every year)  
Introduction to individual transformational journey as part of health science education. Students become aware of their responsibility/resources to facilitate development of the self. Research data, experience of self that is part psychoneuroimmunology, mind-body-spirit approaches. Lecture, scientific literature, meditation, imagery, drawing, group interaction.

CSpH 5111 Ways of Thinking about Health  
S-N only, 2 credit(s), max credits 4;  
Instructor: Hassel, Craig Alan  
Description: CSPH 5111 "Ways of Thinking About Health" offers students a rare opportunity to explore diverse cultural contexts through field-trip immersion experiences. In this course, we will explore fundamental aspects of several different health-care systems, including Indigenous North American Medicine, Vedic Medicine, Traditional Chinese Medicine and biomedicine. The field-trip learning serves as a micro-cultural immersion experience for the purpose of helping students to understand different worldviews and systems of knowledge that do not correspond to a scientific model. The course is based upon the idea that thinking about different worldviews and healing systems from a detached, survey perspective is a quite different matter than thinking critically within the system being explored to attain deeper learning. Each field trip experience will be followed by a writing assignment, where the student will write on a health care issue of their choice, but from within the perspective of the system being studied. This approach is designed to allow each student the maximum opportunity to explore, experience, appreciate and articulate the cultural diversity in ways of thinking about health.  
Style: 20% Lecture, 30% Discussion, 50% Field Trips.  
Grading: 70% reflection paper, 30% in-class presentation.

CSpH 5211 Peacemaking and Spirituality: A Journey Toward Healing and Strength  
2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Umbreit, Mark S  
Description: This course is designed to provide a basic understanding of the central elements of peacemaking and spirituality in the context of various healthcare and social work settings. Examples include intense interpersonal conflicts between patients/providers, between nurses/social workers, between coworkers; within families and within communities; among friends and within ourselves. This course has 2-credit and 3-credit options. Students in the 3-credit option would go deeper into the subject matter to gain understanding of practices that contribute to peacemaking and spirituality that are grounded in diverse cultural traditions among indigenous people of the world and an understanding of the strengths and significant limitations of the dominant theory and practice of conflict resolution and mediation in Western European culture.

CSpH 5225 Meditation: Integrating Body and Mind  
2 credit(s);  
Instructor: Storlie, Erik Fraser  
Description: Description: The class approaches meditation as a physical, emotional, intellectual, and spiritual inquiry. Students read selections in a variety of relevant texts and develop the ability to enter a state of calm, meditative awareness. Objectives: Students will 1. demonstrate an understanding of the intellectual background of meditation, reading sources from the mainstream religious traditions of East and West, from indigenous sources, from contemporary practitioners, and from current scientific work linking mediation with wellness; 2. demonstrate the ability to assume a strong, stable, and relaxed physical posture sitting on cushions, benches, or chairs; 3. demonstrate the ability to calm the breath through a focus on deep, diaphragm breathing; 4. demonstrate the ability to dwell in steady consciousness of consciousness itself, allowing emotions and thoughts to rise and fall in calm awareness; 5. describe and discuss some of the many scientific, philosophical, existential, and spiritual questions that arise concerning the nature of human consciousness.

CSpH 5226 Advanced Meditation: Body, Brain, Mind, and Universe  
1 credit(s);  
Instructor: Kreitzer, Mary Jo  
Description: Student may contact the instructor or department for information.

CSpH 5313 Acupressure  
1 credit(s);  
Instructor: Culliton, Patricia D  
Description: Student may contact the instructor or department for information.

CSpH 5315 Traditional Tibetan Medicine: Ethics, Spirituality, and Healing
CSpH 5315 Traditional Tibetan Medicine: Ethics, Spirituality, and Healing
2 credit(s);
Instructor: Cameron PhD,Miriam Elaine
Description: This course will introduce students to ethics, spirituality, and healing from the perspective of traditional Tibetan medicine. Traditional Tibetan doctors believe that illness results from imbalance and that treating illness requires correcting the underlying imbalance. Students will learn how to apply these principles personally, integrate them into clinical practice, and consult with a traditional Tibetan doctor. This course is part of 3-course sequence with CSPH 5317 - "Yoga: Ethics, Spirituality, & Healing" (Summer); CSPH 5318 - "Tibetan Medicine, Ayurveda, & Yoga in India" (May Session). CSPH 5315 and CSPH 5317 are prerequisites for CSPH 5318. The course has two sections: in-person and on-line. A student can register for either section. For information, contact Dr. Cameron: <camer008@umn.edu>
Style: 35% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 15% Demonstration, 20% Guest Speakers. The course has 2 sections: in-person and on-line. The 10 classes meet on Wednesdays, from 4:40-7:30 p.m. For info, contact Dr. Cameron: <camer008@umn.edu>
Grading: 50% reports/papers, 10% special projects, 25% journal, 15% class participation. Students may take the course A-F, S-N, or Audit. For info, contact Dr. Cameron: <camer008@umn.edu>
Exam Format: No exams.

CSpH 5317 Yoga: Ethics, Spirituality, and Healing
2 credit(s);
Instructor: Cameron PhD,Miriam Elaine
Description: Student may contact the instructor or department for information.

CSpH 5331 Foundations of Shamanism and Shamanic Healing
S-N only, 2 credit(s);
Instructor: Lawson MD,Karen Lynn
Description: In this fundamentals course, students will learn essential elements of the non-biomedical shamanic "life-way" at the foundation of all shamanism. Participants will study shamanic beliefs about the individual's role in life, community, and the universe, and how these ideas are at the core of all shamanic healing practices. They will study cross-cultural healing beliefs and practices, the unique psychology necessary to understand them, and how these approaches may be used with contemporary healing practices and for personal growth. This course provides a core understanding of shamanic philosophies and ritual etiquette, property preparing students to continue in deeper personal study and/or to participate in an experiential cultural immersion (e.g. via a Global Healing Traditions course.)

CSpH 5341 Overview of Indigenous Hawaiian Healing
2 credit(s);
Instructor: Kreitzer, MaryJo
Description: Student may contact the instructor or department for information.

CSpH 5343 Ayurveda Medicine: The Science of Self-healing
2 credit(s);
Instructor: Tamboli,Ashlesha
Description: Student may contact the instructor or department for information.

CSpH 5503 Aromatherapy Fundamentals
1 credit(s);
Instructor: Halcon PhD,Linda Luciente
Description: Student may contact the instructor or department for information.

CSpH 5522 Therapeutic Horticulture
3 credit(s);
Instructor: Larson, Jean Marie
Description: This course is designed to provide an evidence-based understanding of the central elements of therapeutic horticulture in the context of multiple health care settings. Students will learn the history, principles, precepts, and practical application of therapeutic horticulture. At each session students will investigate the current research of therapeutic horticulture as treatment intervention in relation to various target populations. These findings will be analyzed and synthesized as it pertains to the focus of target population.
CSpH 5533 Introduction to Energy Healing
2 credit(s);
Instructor: STAFF
Description: This course will introduce students to healing techniques that use energetic systems in the body to enhance the body's ability to heal. Therapeutic Touch, Healing Touch, Reiki, acupuncture, reflexology, magnets, homeopathy, and many other modalities will be explored. Scientific theories explaining the mechanisms of energetic medicine and ways to measure energy will be investigated. Students will interact with practitioners of energy healing and describe the outcomes of such a practice.

CSpH 5535 Reiki Healing
S-N only, 1 credit(s);
Instructor: Ringdahl, Deborah Rene
Description: Students will learn the history, principles, precepts, and practical application of Reiki energy healing. Alternative energy healing modalities and current research findings will be discussed. Following activation of the Reiki energy, participants will learn the hand positions used to perform a treatment. A portion of each class meeting will be used to provide Reiki treatments and to discuss findings.

CSpH 5536 Advanced Reiki Healing: Level II
S-N only, 1 credit(s);
Instructor: Ringdahl, Deborah Rene
Description: Students will learn advanced principles and application of Reiki energy healing. The four levels of healing will be further explored, with emphasis on healing at the spiritual level. Following activation of the Reiki energy, participants will learn the energy symbols that allow for energy transfer through space and time. Students will learn to use second level Reiki energy for both distance healing and the standard Reiki treatment. A portion of each class meeting will be used to provide Reiki treatments and to discuss findings. Current literature and research findings will also be discussed.

CSpH 5541 Emotional Healing and Happiness: Eastern and Western Approaches to Transforming the Mind
2 credit(s);
Instructor: Young, Merra Lee
Description: Student may contact the instructor or department for information.

CSpH 5601 Music, Health and Healing
2 credit(s);
Instructor: Heiderscheit PhD, Annie Lynne
Description: This course provides an in-depth exploration of the music in medicine, including music therapy, music medicine and music psychotherapy practices, techniques and interventions. There will be explication of the hypotheses and rationale related to interventions, and an exploration of related research.

CSpH 5605 Movement and Music for Well-being and Healing
2 credit(s);
Instructor: Heiderscheit PhD, Annie Lynne
Description: Student may contact the instructor or department for information.

CSpH 5701 Fundamentals of Health Coaching I
A-F only, 4 credit(s);
Instructor: Lawson MD, Karen Lynn
Description: Please contact department or instructor for further information. There will be a $300 course fee associated with this course.

CSpH 5703 Advanced Health Coaching Practicum
A-F only, 3 credit(s);
Instructor: Schultz, Cindy
Description: Student may contact the instructor or department for information.

CSpH 5704 Business of Health Coaching
A-F only, 1 credit(s);
Instructor: Rae, Michele
Description: Student may contact the instructor or department for information.
CSpH 5711 Optimal Healing Environments
3 credit(s);
Instructor: Kreitzer,MaryJo
Description: Student may contact the instructor or department for information.

CSpH 8191 Independent Study in Complementary Therapies and Healing Practices
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Cameron PhD,Miriam Elaine
Description: Student may contact the instructor or department for information.

CSpH 8191 Independent Study in Complementary Therapies and Healing Practices
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Larson,Jean Marie
Description: Student may contact the instructor or department for information.

CSpH 8191 Independent Study in Complementary Therapies and Healing Practices
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Marshall,Kathleen M
Description: Student may contact the instructor or department for information.

CSpH 8191 Independent Study in Complementary Therapies and Healing Practices
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Heiderscheit PhD,Annie Lynne
Description: Student may contact the instructor or department for information.

Chemical Engineering 151 Amundson Hall

ChEn 1001 Advances in Chemical Engineering and Materials Science
S-N only, 1 credit(s), max credits 2, 1 completion allowed; Recommended for [chemical engineering, materials science/engineering] majors Credit will not be granted if credit has been received for: MATS 1001;
Instructor: Mkhoyan,Andre
Description: Student may contact the instructor or department for information.

ChEn 2001 Material and Energy Balances
A-F only, 4 credit(s);
Instructor: Zhang,Kechun
Description: Student may contact the instructor or department for information.

ChEn 3005 Transport Phenomena: Momentum and Heat
A-F only, 4 credit(s);
Instructor: Cussler Jr,Edward L
Description: Student may contact the instructor or department for information.

ChEn 3041 Industrial Assignment I
A-F only, 2 credit(s); ChEn upper Div, completion of required courses in ChEn prog through fall sem of 3rd yr, GPA of at least 2.80, registered in co-op prog Credit will not be granted if credit has been received for: MATS 3041;
Instructor: Francis,Lorraine F
Description: Student may contact the instructor or department for information.

ChEn 3045 Chemical Engineering Industrial Internship
A-F only, 1 credit(s), max credits 2;
Instructor: Francis,Lorraine F
Description: Student may contact the instructor or department for information.

ChEn 3101 Chemical Engineering Thermodynamics
A-F only, 4 credit(s);
Instructor: Morse,David Clark
ChEn 3701 Introduction to Biomolecular Engineering
A-F only, 3 credit(s);
Instructor: Kokkoli, Efie
Description: Student may contact the instructor or department for information.

ChEn 4041 Industrial Assignment II
A-F only, 2 credit(s); 3041, completion of required courses in ChEn prog through fall sem of 4th year, GPA of at least 2.80, registration in co-op prog Credit will not be granted if credit has been received for: MATS 4041;
Instructor: Francis, Lorraine F
Description: Student may contact the instructor or department for information.

ChEn 4401W Senior Chemical Engineering Lab
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Carella, Raul Alberto
Description: Student may contact the instructor or department for information.

ChEn 4501W Chemical Engineering Process Design
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kumar, Satish
Description: Student may contact the instructor or department for information.

ChEn 4501W Chemical Engineering Process Design
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Tsapatsis, Michael
Description: Student may contact the instructor or department for information.

ChEn 4601 Process Control
A-F only, 3 credit(s);
Instructor: Derby, Jeffrey Jay
Description: Student may contact the instructor or department for information.

ChEn 4701 Advanced Undergraduate Applied Math I: Linear Analysis
A-F only, 3 credit(s); [3102 or 4102], ChEn major upper div Credit will not be granted if credit has been received for: CHEN
ChEn 4704 Advanced Undergraduate Physical Rate Processes I: Transport
A-F only, 3 credit(s);
Instructor: Zasadzinski, Joseph Anthony
Description: Student may contact the instructor or department for information.

ChEn 4707 Advanced Undergraduate Statistical Thermodynamics and Kinetics
A-F only, 3 credit(s);
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 5551 Survey of Renewable Energy Technologies
A-F only, 3 credit(s);
Instructor: Schmidt, Lanny D
Description: Student may contact the instructor or department for information.

ChEn 5751 Biochemical Engineering
A-F only, 3 credit(s);
Instructor: Erickson, Laura L
Description: Chemical engineering principles applied to analysis/design of complex cellular/enzyme processes. Quantitative framework for design of cells for production of proteins, synthesis of antibodies with mammalian cells, or degradation of toxic compounds in contaminated soil.
Style: 90% Lecture, 10% Discussion.
Grading: 30% final exam, 15% special projects, 25% problem solving, 30% other evaluation. hour exams (2)
Exam Format: problem solving

ChEn 5751 Biochemical Engineering
A-F only, 3 credit(s);
Instructor: Hu, Wei-Shou
Description: Chemical engineering principles applied to analysis/design of complex cellular/enzyme processes. Quantitative framework for design of cells for production of proteins, synthesis of antibodies with mammalian cells, or degradation of toxic compounds in contaminated soil.
Style: 90% Lecture, 10% Discussion.
Grading: 30% final exam, 15% special projects, 25% problem solving, 30% other evaluation. hour exams (2)
Exam Format: problem solving

ChEn 5771 Colloids and Dispersions
A-F only, 3 credit(s);
Instructor: Macosko, Chris
Description: Colloids are of increasing importance in both industry and academics. Not only do many commercial products involve colloids, but successful research in modern chemistry, materials science, and physics often requires knowledge of the "colloidal arts" to efficiently control matter and explore new phenomena. This course will introduce the student to many of the key concepts in colloidal science and colloidal engineering. Since surface effects are critical in colloids, the course will also address many fundamental issues of surface chemistry. Background: Physical chemistry Objectives: Students will: - Learn the fundamentals of colloid science, including sedimentation, diffusion, rheology and light scattering. - Learn basic concepts related to surface chemistry including surface tension, contact angles, monolayer formation, monolayer manipulation, Langmuir-Blodgett techniques, adsorption - Develop an understanding for colloidal stability including van der Waals forces, electrostatic interactions, and steric interactions. - Design simple colloidal systems. Text: Berg, John C., An introduction to interfaces and colloids: the bridge to nanoscience, 2009. [Walter Library]
Style: 100% Lecture.

ChEn 5771 Colloids and Dispersions
A-F only, 3 credit(s);
Instructor: Macosko, Chris
Description: Colloids are of increasing importance in both industry and academics. Not only do many commercial products involve colloids, but successful research in modern chemistry, materials science, and physics often requires knowledge of the "colloidal arts" to efficiently control matter and explore new phenomena. This course will introduce the student to many of the key concepts in colloidal science and colloidal engineering. Since surface effects are critical in colloids, the course will also address many fundamental issues of surface chemistry. Background: Physical chemistry Objectives: Students will: - Learn the fundamentals of colloid science, including sedimentation, diffusion, rheology and light scattering. - Learn basic concepts related to surface chemistry including surface tension, contact angles, monolayer formation, monolayer manipulation, Langmuir-Blodgett techniques, adsorption - Develop an understanding for colloidal stability including van der Waals forces, electrostatic interactions, and steric interactions. - Design simple colloidal systems. Text: Berg, John C., An introduction to interfaces and colloids: the bridge to nanoscience, 2009. [Walter Library]
Style: 100% Lecture.

ChEn 8201 Applied Mathematics I: Linear Analysis
A-F only, 3 credit(s); Chemical engineering grad student or instr consent Credit will not be granted if credit has been received for: CHEN 4701;
Instructor: Daoutidis, Prodromos
Description: Student may contact the instructor or department for information.
ChEn 8221 Synthetic Polymer Chemistry
A-F only, 4 credit(s); Undergrad organic chemistry course, undergrad physical chemistry course or instr consent
Credit will not be granted if credit has been received for: CHEM 4221;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

ChEn 8301 Physical Rate Processes I: Transport
A-F only, 3 credit(s);
Instructor: Zasadzinski, Joseph Anthony
Description: Student may contact the instructor or department for information.

ChEn 8401 Physical and Chemical Thermodynamics
A-F only, 3 credit(s);
Instructor: Aydil, Eray S
Description: Fundamentals of classical thermodynamics with emphasis on solving problems encountered in chemical engineering and materials science. The course is an organized exposition of fundamental concepts and traditional tools that will help chemical engineers and materials scientists understand and analyze the systems they are likely to encounter while conducting original research.
Style: 100% Lecture.
Grading: 40% mid exam, 20% final exam, 40% written homework.
Exam Format: Problem solving with open class notes provided by the instructor and open student notes.

ChEn 8402 Statistical Thermodynamics and Kinetics
A-F only, 3 credit(s);
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 8900 Seminar
S-N only, 1 credit(s);
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 8993 Directed Study
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 8994 Directed Research
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

Chemical Physics 139 Smith Hall

ChPh 8601 Seminar: Modern Problems in Chemical Physics
S-N only, 1 credit(s), max credits 2;
Instructor: Siepmann, Ilja
Description: Student may contact the instructor or department for information.

Chemistry 139 Smith Hall

Chem 1015 Introductory Chemistry: Lecture
3 credit(s);
Instructor: STAFF
Description: Chem 1015 is an undergraduate introductory chemistry course. It may meet a chemistry or science requirement or it may serve as a bridge between high school chemistry and Chem 1021. This course provides a broad survey of chemistry, including an introduction to organic chemistry. Additional topics include matter and energy; measurements in chemistry; ionic and molecular compounds; chemical reactions and chemical equilibrium; gases, liquids, solids, and solutions; acids and bases; and nuclear
chemistry.

**Style:** 100% Lecture.

**Grading:** 5% problem solving. 95% three mid-term exams and a final exam

### Chem 1017 Introductory Chemistry: Laboratory

**A-F only, 1 credit(s);**

**Instructor:** STAFF

**Description:** Registration by department permission only. See staff in 115 Smith Hall or call 612-624-0026. CHEM 1017 is identical to the lab for CHEM 1011, but students do not attend any lecture or take any exams. Intended only for students who have taken the lecture-only course CHEM 1015, and later determine that taking the lab is now required.

**Style:** 100% Laboratory.

### Chem 1061 Chemical Principles I

3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061

Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences

**Instructor:** Leopold,Kenneth R

**Description:** Student may contact the instructor or department for information.

### Chem 1061 Chemical Principles I

3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061

Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences

**Instructor:** Harle,Marissa Lynn

**Description:** Student may contact the instructor or department for information.

### Chem 1061 Chemical Principles I

3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061

Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences

**Instructor:** Salmon,Debra J

**Description:** Student may contact the instructor or department for information.

### Chem 1061 Chemical Principles I

3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061

Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences

**Instructor:** Driessen,Michelle

**Description:** Student may contact the instructor or department for information.

### Chem 1061 Chemical Principles I

3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061

Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences

**Instructor:** Hinkle,Lindsay M

**Description:** Student may contact the instructor or department for information.

### Chem 1062 Chemical Principles II

3 credit(s); Grade of at least C- in 1061 or equiv, Concurrent registration is required (or allowed) in 1066; registration for 1066 must precede registration for 1062

Credit will not be granted if credit has been received for: CHEM 1072H; Meets CLE req of Physical Sciences

**Instructor:** Leopold,Doreen Geller

**Description:** Student may contact the instructor or department for information.
Chem 1062 Chemical Principles II  
3 credit(s); Grade of at least C- in 1061 or equiv, Concurrent registration is required (or allowed) in 1066; registration for 1066 must precede registration for 1062; Credit will not be granted if credit has been received for: CHEM 1072H; Meets CLE req of Physical Sciences  
Instructor: Whited, Charlotte  
Description: Student may contact the instructor or department for information.

Chem 1065 Chemical Principles I Laboratory  
A-F only, 1 credit(s); Concurrent registration is required (or allowed) in 1061; Credit will not be granted if credit has been received for: CHEM 1075H; Meets CLE req of Physical Sciences  
Instructor: Driessen, Michelle  
Description: Student may contact the instructor or department for information.

Chem 1066 Chemical Principles II Laboratory  
A-F only, 1 credit(s); Concurrent registration is required (or allowed) in 1062; Credit will not be granted if credit has been received for: CHEM 1076H; Meets CLE req of Physical Sciences  
Instructor: Driessen, Michelle  
Description: Student may contact the instructor or department for information.

Chem 1071H Honors Chemistry I  
A-F only, 3 credit(s); Honors student, permission of University Honors Program, Concurrent registration is required (or allowed) in 1075H; registration for 1075H must precede registration for 1071H; Credit will not be granted if credit has been received for: CHEM 1061; Meets CLE req of Physical Sciences  
Instructor: Blank, David A  
Description: Student may contact the instructor or department for information.

Chem 1075H Honors Chemistry I Laboratory  
A-F only, 1 credit(s); Concurrent registration is required (or allowed) in 1071H, honors student, permission of University Honors Program; Credit will not be granted if credit has been received for: CHEM 1065; Meets CLE req of Physical Sciences  
Instructor: Driessen, Michelle  
Description: Student may contact the instructor or department for information.

Chem 1231 Organic Chemistry I  
A-F only, 4 credit(s); Meets CLE req of Physical Sciences  
Instructor: Muthyala, Rajeev S.  
Description: Student may contact the instructor or department for information.

Chem 1231 Organic Chemistry I  
A-F only, 4 credit(s); Meets CLE req of Physical Sciences  
Instructor: DeZutter, Christopher Blake  
Description: Student may contact the instructor or department for information.

Chem 1231 Organic Chemistry I  
A-F only, 4 credit(s); Meets CLE req of Physical Sciences  
Instructor: Nelson, Michelle Kathleen  
Description: Student may contact the instructor or department for information.

Chem 1231 Organic Chemistry I  
A-F only, 4 credit(s); Meets CLE req of Physical Sciences  
Instructor: Bampoh, Victoria Naa Kwale  
Description: Student may contact the instructor or department for information.

Chem 1905 Freshman Seminar  
A-F only, 2 credit(s), max credits 3, 1 completion allowed;  
Instructor: Barany, George  
Description: Student may contact the instructor or department for information.
Chem 1905 Freshman Seminar
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Noland, Wayland E
Description: Student may contact the instructor or department for information.

Chem 1905 Freshman Seminar
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Penn, Lee
Description: My Other Car is a Bicycle: This seminar will be devoted to researching bicycling as a viable alternative to car-based transportation. We will examine the negative effects of choosing cars for transportation, research how city planning can limit or enhance options for non-car-based transportation, and compare bike movements and cultures in cities worldwide, including the twin cities. We will learn some basic bike repair and practice urban riding skills. Classes will include field trips (by bike, of course), guest lectures, and more.

Chem 2094 Directed Research
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 2101 Introductory Analytical Chemistry Lecture
3 credit(s);
Instructor: STAFF
Description: Primarily for chemistry majors. Methods/concepts of measurement by chemical/instrumental analysis, including titrimetry, quantitative spectrophotometric analysis, chromatographic separations, equilibrium/rate methods.
Style: 100% Lecture.
Grading: 10% problem solving, 90% other evaluation. Mid-terms exams and final exam

Chem 2111 Introductory Analytical Chemistry Lab
2 credit(s);
Instructor: STAFF
Description: Lab for CHEM 2101. High precision methods, acidimetry and complexometry, single and multicomponent analysis by spectrophotometry, analysis of mixtures by ion exchange and gas chromatography, enzymatic and rate methods.
Style: 25% Lecture, 75% Laboratory.
Grading: 10% final exam, 5% quizzes, 85% laboratory evaluation.

Chem 2301 Organic Chemistry I
3 credit(s); C- or better in 1062/1066 or 1072H/1076H or equiv or B or better in 1071H/1075H, 1072H/1076H Note: Students who have previously received a grade of C- or better and wish to repeat this course should not register for it during the registration queue. If they do they may have their registration canceled. They will be allowed to register on a space available basis, during open enrollment. Credit will not be granted if credit has been received for: CHEM 2331H;
Instructor: STAFF
Description: Important classes of organic compounds, their constitutions, configurations, conformations, and reactions. Relationships between molecular structure and chemical reactivity/properties. Spectroscopic characterization of organic molecules.
Style: 100% Lecture.
Grading: 100% other evaluation. 4 Mid-Term Exams and a Final Exam
Exam Format: Mix of multiple choice and written exams

Chem 2302 Organic Chemistry II
3 credit(s); Grade of at least C- in 2301 Credit will not be granted if credit has been received for: CHEM 2304;
Instructor: STAFF
Description: Reactions, synthesis, and spectroscopic characterization of organic compounds, organic polymers, and biologically important classes of organic compounds such as lipids, carbohydrates, amino acids, peptides, proteins, and nucleic acids.
Style: 100% Lecture.
Grading: 100% other evaluation. 4 Mid-Term Exams and a Final Exam
Exam Format: Mix of multiple choice and written questions
Chem 2311 Organic Lab
4 credit(s);
Instructor: Wissinger, Jane E.
Description: This course is designed for undergraduates in the health and science fields that need to fulfill the undergraduate organic chemistry laboratory requirement. It is to be taken after the Organic I lecture course 2301, and concurrently or subsequent to Organic lecture course 2302. The 2311 course is one-semester in length, worth 4 credits, and equivalent to the usual two-semester organic laboratory courses taught at other institutions. In the course, interesting and relevant experiments are used to teach the techniques used in the organic laboratory to study, synthesize, isolate, and purify organic compounds. A wide array of instruments including IR, NMR, and GC are used for analysis and computers are used to study molecular conformations and chemical properties. Molecules studied include analgesics, flavors, natural products, dyes, recyclable polymers, and chemiluminescent compounds. Experiments are presented in a manual written by Wissinger and a laboratory techniques textbook ("Pavia") is required. Results are recorded both in report and worksheet formats. Overall, the objective is to give the students hands-on experience illustrating chemistry they learned in lecture, teach problem-solving skills, and demonstrate the value of organic chemistry in our daily lives.
Style: 10% Lecture, 90% Laboratory.
Grading: 74% reports/papers, 9% quizzes, 17% other evaluation. preparation and technique

Chem 2312H Honors Organic Lab
A-F only, 5 credit(s);
Instructor: Hoye, Thomas R.
Description: Student may contact the instructor or department for information.

Chem 2331 General Chemistry I
A-F only, 3 credit(s);
Instructor: Prat-Resina, Xavier
Description: Student may contact the instructor or department for information.

Chem 2331H Honors Elementary Organic Chemistry I
A-F only, 3 credit(s); At least B+ in 1032H, UHP student Credit will not be granted if credit has been received for: CHEM 2301;
Instructor: Tolman, William B
Description: Student may contact the instructor or department for information.

Chem 2332 Laboratory for General Chemistry I
A-F only, 1 credit(s);
Instructor: Larsen, Peter Lawrence
Description: Student may contact the instructor or department for information.

Chem 2332 Laboratory for General Chemistry I
A-F only, 1 credit(s);
Instructor: Bampoh, Victoria Naa Kwale
Description: Student may contact the instructor or department for information.

Chem 2910 Special Topics in Chemistry
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 2910H Special Topics in Chemistry
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 4001 Chemistry of Biomass and Biomass Conversion to Fuels and Products
A-F only, 4 credit(s); Meets CLE req of Environment
Instructor: Tschirner, Ulrike Waltrau
Description: The first half of this course is focused on fundamentals such as the chemical composition of plant materials and typical reactions. The topics covered include: Carbohydrate Chemistry, Cellulose, Hemicellulose, Lignin, distribution of chemical components in plant material, Extractives and Oils, Starch, Proteins including Enzymes, Alkaloids. The second part of this class is focused on chemical reactions involved in conversion of biomass to industrial products; it includes the new emerging field of biomass conversion to Bioenergy and Bioproducts and traditional processes such as production of rayon or papermaking fiber. Examples of chemical reactions involved in biorefining include: conversion of cellulose and hemicellulose to ethanol, furfural, PLA (Polylactic acid); conversion of oil to biodiesel; gasification of biomass followed by Fisher Tropsch conversion to fuels.
Style: 70% Lecture, 30% Discussion.
Grading: 100% other evaluation. Based on 6 quizzes, 6 homeworks, final exam

Chem 4011 Mechanisms of Chemical Reactions
3 credit(s);
Instructor: STAFF
Description: "Mechanisms of Chemical Reactions" is intended to prepare you to (1) elucidate the mechanisms of chemical reactions based on kinetic and thermodynamic principles and collected data, and (2) be able to evaluate mechanistic arguments made in the literature. The course is meant to be broadly applicable to many types of chemistry - organic, physical, materials, computational, etc.- and will focus on basic principles of reactions rather than specific kinds of molecules.
Style: 100% Lecture.
Grading: 67% mid exam, 33% problem solving.

Chem 4094V Directed Research
1-5 credit(s), max credits 75, 15 completions allowed; Meets CLE req of Writing Intensive
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 4094W Directed Research
1-5 credit(s), max credits 75, 15 completions allowed; Meets CLE req of Writing Intensive
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 4101 Modern Instrumental Methods of Chemical Analysis
A-F only, 3 credit(s);
Instructor: STAFF
Description: Basic electronic, optical, computer technologies employed in design of chemical instrumentation. Advanced topics in spectroscopy (e.g., FT-nmr, FT-IR, atomic absorption/emission). Electrochemistry. Mass spectrometry.
Style: 100% Lecture.
Grading: 30% mid exam, 30% final exam, 7% special projects, 15% quizzes, 15% problem solving, 3% other evaluation. extra materials

Chem 4201 Materials Chemistry
3 credit(s); [[4502 or equiv], 4701] or instr consent Credit will not be granted if credit has been received for: CHEM 8201;
Instructor: STAFF
Description: Crystal systems/unit cells, phase diagrams, defects/interfaces, optical/ dielectric properties, electrical/thermal conductivity, X-ray diffraction, thin film analysis, electronic structure, polarons/phonons, solid state chemistry, liquid/molecular crystals, polymers, magnetic/optical materials, porous materials, ceramics, piezoelectric materials, biomedical materials, catalysts.
Style: 100% Lecture.
Grading: 31% mid exam, 38% final exam, 15% quizzes, 16% problem solving.

Chem 4221 Introduction to Polymer Chemistry
3 credit(s); [2302, 4501] or instr consent Credit will not be granted if credit has been received for: MATS 5221;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

Chem 4311W Advanced Organic Chemistry Lab
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Reactions, techniques and instrumental methods used in modern synthetic organic chemistry.
**Chem 4321 Organic Synthesis**
3 credit(s);
Instructor: STAFF
Description: Fundamental concepts, reactions, reagents, structural/stereochemical issues, and mechanistic skills for organic chemistry.

**Chem 4361 Interpretation of Organic Spectra**
3 credit(s);
Instructor: STAFF
Description: Application of nuclear magnetic resonance, mass, ultraviolet, and infrared spectral analyses to organic structural problems.
Style: 100% Lecture.
Grading: 60% mid exam, 20% final exam, 20% problem solving.

**Chem 4411 Introduction to Chemical Biology**
3 credit(s);
Instructor: STAFF
Description: Chemistry of amino acids, peptides, proteins, lipids, carbohydrates, and nucleic acids; topics will include structure, nomenclature, synthesis, and reactivity, as well as an overview of techniques used to characterize these biomolecules.
Style: 100% Lecture.
Grading: 30% mid exam, 20% final exam, 20% class participation, 30% problem solving.

**Chem 4501 Introduction to Thermodynamics, Kinetics, and Statistical Mechanics**
A-F only, 3 credit(s);
Instructor: Bierbaum, Andrew Joseph
Description: Student may contact the instructor or department for information.

**Chem 4502 Introduction to Quantum Mechanics and Spectroscopy**
A-F only, 3 credit(s);
Instructor: Gagliardi, Laura
Description: Student may contact the instructor or department for information.

**Chem 4511W Advanced Physical Chemistry Lab**
3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Experiments illustrating principles and methods of thermodynamics, reaction kinetics, and quantum mechanics.
Style: 20% Lecture, 80% Laboratory.
Grading: 100% laboratory evaluation.

**Chem 4701 Inorganic Chemistry**
3 credit(s);
Instructor: STAFF
Description: Introduction to inorganic chemistry at an advanced level. Periodic trends. Structure and bonding concepts in compounds where s and p electrons are important. Descriptive chemistry of solids and transition metal compounds. Emphasis on transition metal chemistry. Advanced topics in main group and materials chemistry.
Style: 100% Lecture.
Grading: 60% mid exam, 25% final exam, 15% quizzes.

**Chem 4715 Physical Inorganic Chemistry**
3 credit(s);
Instructor: Stein, Andreas
Description: Student may contact the instructor or department for information.

**Chem 8011 Mechanisms of Chemical Reactions**
4 credit(s);
Chem 8025 Introduction to Graduate Research
A-F only, 1-2 credit(s), max credits 2;
Instructor: Bowser, Michael
Description: Student may contact the instructor or department for information.

Chem 8066 Professional Conduct of Chemical Research
S-N only, 1 credit(s);
Instructor: Truhlar, Donald G
Description: Student may contact the instructor or department for information.

Chem 8152 Analytical Spectroscopy
4 credit(s);
Instructor: Haynes, Christy L
Description: Student may contact the instructor or department for information.

Chem 8157 Bioanalytical Chemistry
A-F only, 4 credit(s);
Instructor: Bowser, Michael
Description: Student may contact the instructor or department for information.

Chem 8201 Materials Chemistry
A-F only, 4 credit(s);[4701, 3502] or instr consent Credit will not be granted if credit has been received for: CHEM 4201;
Instructor: Gladfelter, Wayne L
Description: Student may contact the instructor or department for information.

Chem 8221 Synthetic Polymer Chemistry
4 credit(s);[Undergrad organic chemistry course, undergrad physical chemistry course] or instr consent Credit will not be granted if credit has been received for: CHEM 4221;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

Chem 8321 Organic Synthesis
4 credit(s);
Instructor: Hoye, Thomas R.
Description: Student may contact the instructor or department for information.

Chem 8361 Interpretation of Organic Spectra
4 credit(s);
Instructor: Taton, T. Andrew
Description: Student may contact the instructor or department for information.

Chem 8411 Introduction to Chemical Biology
4 credit(s);
Instructor: Pomerantz, William Charles
Description: Student may contact the instructor or department for information.

Chem 8541 Dynamics
4 credit(s);Undergrad physical chem courseCredit will not be granted if credit has been received for: CHEM 5541;
Instructor: Truhlar, Donald G
Description: Chemistry 8541 is a core graduate course in physical chemistry and chemical physics. One set of lectures primarily covers classical mechanics and classical dynamics, including Newtonian, Lagrangian, and Hamiltonian dynamics, the Euler-Lagrange equation, phase space dynamics, the pendulum, angular momentum and rotational motion, oscillations and forced and damped oscillators, normal modes of vibration, collision theory and cross sections, action variables, adiabatic invariants, the vibrating string, and potential theory. The course will also include several topics in mathematics, such as vector calculus, including the divergence theorem, Fourier series and transforms, differentials, delta functions, curvilinear coordinates and orthogonal matrices, not just because of the...
importance of the various mathematical topics in classical dynamics but also because this is mathematics that every physical chemistry Ph.D. should know.

**Chem 8551 Quantum Mechanics I**

4 credit(s); undergrad physical chem course

**Credit will not be granted if credit has been received for:** CHEM 5551;

**Instructor:** Massari, Aaron

**Description:** Student may contact the instructor or department for information.

**Chem 8561 Thermodynamics, Statistical Mechanics, and Reaction Dynamics I**

4 credit(s);

**Instructor:** Siepmann, Ilja

**Description:** Student may contact the instructor or department for information.

**Chem 8601 Seminar: Modern Problems in Chemistry**

S-N only, 1 credit(s);

**Instructor:** Lu, Connie C

**Description:** Student may contact the instructor or department for information.

**Chem 8602 Seminar Presentation: Modern Problems in Chemistry**

A-F only, 1 credit(s);

**Instructor:** Lu, Connie C

**Description:** Student may contact the instructor or department for information.

**Chem 8715 Physical Inorganic Chemistry**

4 credit(s);

**Instructor:** Stein, Andreas

**Description:** Student may contact the instructor or department for information.

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**Chicano Studies**

19 Scott Hall

**Chic 1102 Latinos in the United States: Culture and Citizenship**

3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** STAFF

**Description:** Historical and cultural study of the complex and multilayered relationship that Latinos have with the U.S., their country of origin, as well as the social, cultural, and political dynamics that influence Latino identity, politics, and sense of belonging in the U.S. Focuses on the concept of cultural citizenship.

**Chic 1102H Latinos in the United States: Culture and Citizenship**

A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** Aguilar, Rodolfo

**Description:** Student may contact the instructor or department for information.

**Chic 1275 Service Learning in the Chicano/Latino Community**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CHIC 3275; Meets CLE req of Civic Life and Ethics

**Instructor:** Ganley, Kathleen Marie

**Description:** This course is premised on the notion that there are many institutional and social constraints and limitations within schools that block equitable educational opportunities and outcomes for Latino students. It is also based on the idea that students who fail to learn in our schools and fail to graduate are our responsibility. In this course, you will be asked to think and act as you contribute to youth education. You will study the education of Chicanos/Latinos in the United States through the integration of academic materials, discussion, guest speakers and visits to the community while doing community service in an educational setting with Latino youth. Over the course of the semester, you will provide 36 hours of tutoring and mentoring in culturally grounded programs. You will analyze the education of Chicanos/Latinos while reflecting on issues such as equality, language usage, graduation statistics, college enrollment, various educational methodologies, special challenges faced by immigrants, and current legislation to create change. Students will also use what they learn in this course to affect legislative change. This course meets the Liberal Education Requirements in Civic Life and Ethics (theme).

**Style:** 20% Lecture, 40% Discussion. Presentations, Web-CT

**Grading:** 20% reports/papers, 10% in-class presentation, 10% class participation, 10% problem solving, 50% other evaluation. Tutoring
Chic 1902 Freshman Seminar: Chicana/o-Latina/o History, Culture & Identity
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Torres PhD, Eden E.
Description: This course is designed for the CASA SOL students. We will explore the history and development of Chicana/o and Latina/o social movements, political identities, and aesthetics. We will discuss the meaning of changing demographics and the role of Latinas/os in the global economy as both consumers and creators of culture. You will be challenged to identify, analyze, and evaluate your own social location in relation to others.
Style: 20% Lecture, 10% Film/Video, 50% Discussion, 20% Small Group Activities.
Grading: 20% reports/papers, 30% reflection paper, 25% in-class presentation, 25% class participation. In-class presentation is a group project designed to facilitate discussion.

Chic 3212 Chicana Studies: La Chicana in Contemporary Society
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: This course explores the scholarly, activist and creative work of Chicanas or politically defined women of the Mexican American community. The readings, lectures and learning activities are interdisciplinary in nature, drawing on a wide variety of fields and expertise. We will emphasize the historical, political, socioeconomic and cultural contexts in which the author's are writing; look at various cultural processes relevant to Mexican American women's lives; learn, analyze and critique Chicana feminist perspectives, theories, methods and modes of inquiry, paying attention to their strategic uses of autoethnography in the creation of Chicana subjectivity, identities, and aesthetics.

Chic 3275 Service Learning in the Chicano/Latino Community
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CHIC 1275; Meets CLE req of Civic Life and Ethics
Instructor: Ganley, Kathleen Marie
Description: This course is premised on the notion that there are many institutional and social constraints and limitations within schools that block equitable educational opportunities and outcomes for Latino students. It is also based on the idea that students who fail to learn in our schools and fail to graduate are our responsibility. In this course, you will be asked to think and act as you contribute to youth education. You will study the education of Chicanos/Latinos in the United States through the integration of academic materials, discussion, guest speakers and visits to the community while doing community service in an educational setting with Latino youth. Over the course of the semester, you will provide 36 hours of tutoring and mentoring in culturally grounded programs. You will analyze the education of Chicanos/Latinos while reflecting on issues such as equality, language usage, graduation statistics, college enrollment, various educational methodologies, special challenges faced by immigrants, and current legislation to create change. Students will also use what they learn in this course to affect legislative change. This course meets the Liberal Education Requirements in Civic Life and Ethics (theme).
Style: 20% Lecture, 40% Discussion, presentations, Web-CT
Grading: 20% reports/papers, 10% in-class presentation, 10% class participation, 10% problem solving, 50% other evaluation. tutoring at community site

Chic 3375 Folklore of Greater Mexico
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: Scholarly survey and exploration of the socio-cultural function of various types of folklore in Greater Mexico. Students analyze the ways in which folklore constructs and maintains community, as well as resists and engenders cultural shifts.

Chic 3423 Central American Revolutions
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 3423;
Instructor: McNamara, Patrick J
Description: Throughout the 1970s and 1980s, civil war and political violence swept the Central American isthmus. In an attempt to understand both the domestic and international factors that contributed to this upheaval, this course will examine the social, political, and economic issues that have shaped Central American history for nearly two centuries. We will focus primarily on the influences of colonial histories, capitalist development, ethnic and racial conflict, foreign intervention, the Catholic Church, and civil war throughout the region. We will emphasize both nation-state formation from the perspective of six independent countries (El Salvador, Guatemala, Honduras, Panama, Costa Rica, and Nicaragua), and broader region-wide experiences around export capitalism, military interventions, armed uprisings, popular protest, emigration, and ethnic conflict. The course is organized around these two major approaches. We will begin with a comparative region-wide perspective as, "The Isthmus of Central America: Colonialism, Revolution, and the Struggle for Autonomy." We will then focus on the six independent nations in the course section called, "The Nations of Central America:
Independence, Nationalism, and the Struggle for Citizenship."

Style: 70% Lecture, 30% Discussion.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% class participation.
Exam Format: essay exams

Chic 3444 Chicana and Chicano History: 1821-1945
3 credit(s); Credit will not be granted if credit has been received for: HIST 3441; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: STAFF
Description: This course examines the experiences of people of Mexican descent in the U.S. The course provides a foundation for understanding the central role of Chicana/os in the history, culture, and politics of the U.S. Students will survey the major challenges faced by people of Mexican descent in the U.S. in order to critically discuss the social, economic, cultural, and political changes that have influenced the day-to-day life of Chicana/os and how Chicana/os have asserted themselves as agents of change.

Chic 3507W Introduction to Chicana/o Literature
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3507W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Duenes, Michael
Description: Student may contact the instructor or department for information.

Chic 3507W Introduction to Chicana/o Literature
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3507W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Rodriguez, Reina C
Description: Student may contact the instructor or department for information.

Chic 3852 Chicana/o Politics
3 credit(s); Credit will not be granted if credit has been received for: POL 3752; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: STAFF
Description: Explores the theory and practice of Chicana/o politics through an analysis of Mexican American experience, social agency, and response to larger political systems and behaviors using social science methods of inquiry. Looks at unequal power relations, social justice, and the political economy.

Chic 3888 Immigration and the U.S. Latina/o Experience: Diaspora, Identity, and Community
3 credit(s);
Instructor: Patino Jr., Jimmy Charles
Description: Explores the experiences of migrants from Latin America to the United States in the 20th and 21st century. Considers the transnational context in which migrants transverse the borders of their home countries and the United States. Also explores migrant engagements with U.S. society, pre-existing Latina/o and other ethnic communities, and experiences within the political, economic, and social aspects of life at the local and global level.

Chic 3993 Directed Studies
1-9 credit(s), max credits 16, 16 completions allowed;
Instructor: Mendoza, Louis Gerard
Description: Student may contact the instructor or department for information.

Chic 4232 Chicana/o - Latina/o Gender and Sexuality Studies
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: Explores critical thinking of Chicanas/os andLatinas/os around the construction of gender and the politics of sexual identity. Examines how the self is gendered in relationship to sexual, racial, class, and national identities under different social structural conditions. Considers the way in which the borders that define and confine sexual norms shift over time.

Chic 4275 Theory in Action: Community Engagement in a Social Justice Framework
3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Sass Zaragoza, Lisa
Description: In this course, we examine theoretical frameworks for understanding social justice and social agency. We study identity
theory, power, race, class and privilege and how these play out in our own lives, particularly as we interreacts and work within various community settings. The majority of the class will focus on Latino worker's experiences organizing within the global economy, particularly here in Minnesota. Students will spend at least 25 hours working with a community based group, organization, union, worker center or policy initiative learning through experience different models for movement building, advocacy and change.

Chic 4901W Senior Paper
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Mendoza, Louis Gerard
Description: Student may contact the instructor or department for information.

Chic 5993 Directed Studies
1-3 credit(s), max credits 16, 16 completions allowed;
Instructor: Mendoza, Louis Gerard
Description: Student may contact the instructor or department for information.

Child Psychology 104 Child Development

CPsy 1904 Freshman Seminar: Global Perspectives: International & Cross-cult Studies of Childhood
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Maratsos, Michael P
Description: Student may contact the instructor or department for information.

CPsy 2301 Introductory Child Psychology
4 credit(s); 4 cr intro psych Credit will not be granted if credit has been received for: CPSY 3301;
Instructor: Heinrichs PhD, Marian R
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This course covers the period from conception through adolescence. The curriculum covers the principles and themes of development and is aligned closely with the textbook. To paraphrase the text: Development consists of age-related changes that are orderly, that is, change follows a logical sequence; cumulative, that is, each phase of development includes all the changes that occur before it; and directional, such that development always moves towards greater complexity. The challenge is to explain development. Our focus will be on research. We need to know how research happens, how it begins with a testable idea and then becomes real through observations or experiments with actual participants, and finally, how to think critically about the results and how this can impact policy.
Style: Online with handwritten exams
Grading: 15% mid exam, 15% final exam, 20% special projects, 50% written homework.
Exam Format: Supervised, in-person (not online) exams.

CPsy 2301 Introductory Child Psychology
4 credit(s); 4 cr intro psych Credit will not be granted if credit has been received for: CPSY 3301;
Instructor: Lawler, Jamie M
Description: Student may contact the instructor or department for information.

CPsy 2301 Introductory Child Psychology
4 credit(s); 4 cr intro psych Credit will not be granted if credit has been received for: CPSY 3301;
Instructor: Warren, Henriette
Description: This undergraduate survey course will examine social and cognitive development from the prenatal period through adolescence. The major goals include fostering an understanding of the usefulness of a developmental approach to psychological issues, and familiarizing students with current research and methodology in child psychology. This course emphasizes normal physical, cognitive, emotional, and social development. Class sessions will include a mixture of lectures, discussion, videos, and group activities.
Style: 80% Lecture, 10% Discussion. Instructional videos
Grading: 50% mid exam, 20% final exam, 15% reports/papers, 5% class participation, 10% laboratory evaluation.
Exam Format: Multiple choice

CPsy 3308W Introduction to Research Methods in Child Psychology
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Karatekin, Canan
Description:
Style: 100% Lecture.
Grading: The course will include many ways of evaluating students. Please contact the instructor for the specific grading criteria.
Exam Format: Short-response

CPsy 3308W Introduction to Research Methods in Child Psychology
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Kuo, Sally I-Chun
Description: Student may contact the instructor or department for information.

CPsy 3308W Introduction to Research Methods in Child Psychology
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Hayakawa, Cathy M
Description: Student may contact the instructor or department for information.

CPsy 4302 Infant Development
A-F only, 3 credit(s);
Instructor: Hetherington, Chelsea
Description: Student may contact the instructor or department for information.

CPsy 4303 Adolescent Psychology
A-F only, 3 credit(s);
Instructor: Martin, David Myron
Description: Student may contact the instructor or department for information.

CPsy 4303 Adolescent Psychology
A-F only, 3 credit(s);
Instructor: Shlafer, Rebecca J
Description: Student may contact the instructor or department for information.

CPsy 4310 Special Topics in Child Development: Incarceration and the Family
1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Shlafer, Rebecca J
Description: Student may contact the instructor or department for information.

CPsy 4311 Behavioral and Emotional Problems of Children
A-F only, 3 credit(s);
Instructor: Masten, Ann S.
Description: Student may contact the instructor or department for information.

CPsy 4331 Social and Personality Development
A-F only, 3 credit(s);
Instructor: Clarke, Stephanie Blair
Description: Student may contact the instructor or department for information.

CPsy 4331 Social and Personality Development
A-F only, 3 credit(s);
Instructor: Monn, Amy R
Description: Student may contact the instructor or department for information.

CPsy 4334W Children, Youth in Society
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Yussen, Steve
Description: Student may contact the instructor or department for information.

CPsy 4341 Perceptual Development
3 credit(s);
Instructor: Yonas, Albert
Description: Student may contact the instructor or department for information.
CPsy 4343 Cognitive Development
A-F only, 3 credit(s);
Instructor: Carlson, Stephanie M
Description: Student may contact the instructor or department for information.

CPsy 4345 Language Development and Communication
A-F only, 3 credit(s);
Instructor: Sera PhD, Maria D
Description: This course is designed to introduce students to the study of language development. The course is organized into four sections: Speech Perception, Lexical Semantics, Syntax and Morphology, and Language and Cognition.
Style: 90% Lecture, 10% Discussion.
Grading: 40% mid exam, 40% final exam, 15% reports/papers, 5% class participation.
Exam Format: multiple choice and short answer

CPsy 4347W Senior Project
A-F only, 2 credit(s); Meets CLE req of Writing Intensive
Instructor: Langworthy, Sara Elizabeth
Description: Student may contact the instructor or department for information.

CPsy 4993 Directed Experiences in Early Childhood Education
A-F only, 3 credit(s);
Instructor: Carlson, Ann Ruhl
Description: This is a required course for students in the Foundations of Early Childhood and the Early Childhood Initial Licensure program. It is an introduction to the field of early childhood education. A primary focus of the class is to review typical development at various ages and stages of the early childhood period and to apply this knowledge in educational settings. There is a practicum component to the course; students will be observing and participating in child development programs regularly. There will be observation assignments associated with practicum work. Students will perform systematic observation of children accurately and objectively. Additionally, various topics and themes of interest to early childhood professionals will be explored.
Grading: 15% final exam, 20% reports/papers, 25% quizzes, 20% written homework, 20% attendance.

CPsy 4994 Directed Research in Child Psychology
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: STAFF
Description: This is an opportunity for students to assist in developmental research. Many opportunities are listed on our CPSY undergraduate advising board in Room 106. Possible tasks might include making phone calls to solicit subjects; scheduling and confirming appointments; updating information; filming subjects; coding data, entering data into a computer; tabulating data; analyzing data statistically; sitting with siblings during experiments; doing library research; collecting archival data. This list is not exhaustive. A contract and override are required to register. The student uses a contract as an opportunity to clarify opportunities, responsibilities, and desires, etc.
Style: 10% Discussion, 90% Laboratory.
Grading: 20% special projects, 70% laboratory evaluation, 10% problem solving.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Cicchetti PhD, Dante
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Maratos, Michael P
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Masten, Ann S.
Description: Student may contact the instructor or department for information.
CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Georgieff, Michael K
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Thomas, Kathleen M
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Roisman, Glenn I
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Yonas, Albert
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Sera PhD, Maria D
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Crick, Nicki R
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Collins, W Andrew
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Gunnar PhD, Megan R
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Yussen, Steve
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Karatekin, Canan
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Gewirtz, Abigail
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Reynolds, Arthur J.
Description: Student may contact the instructor or department for information.
CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Zelazo, Philip David
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Carlson, Stephanie M
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Koenig, Melissa
Description: Student may contact the instructor or department for information.

CPsy 4994V Directed Research in Child Psychology (Honors Thesis)
1-6 credit(s), max credits 6, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Mazzocco, Michele M
Description: Student may contact the instructor or department for information.

CPsy 4996 Field Study in Child Psychology
S-N only, 1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: Warren, Henriette
Description: Student may contact the instructor or department for information.

CPsy 5187 Master's Paper in Early Childhood Education
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Carlson PhD, LaVonne
Description: Student may contact the instructor or department for information.

CPsy 5251 Social and Philosophical Foundations of Early Childhood Education
A-F only, 2 credit(s);
Instructor: Carlson PhD, LaVonne
Description: Student may contact the instructor or department for information.

CPsy 5253 Facilitating Cognitive and Language Learning in Early Childhood Education
A-F only, 3 credit(s);
Instructor: Murphy, Barbara Ann
Description: Student may contact the instructor or department for information.

CPsy 5281 Student Teaching in Early Childhood Education
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Murphy, Barbara Ann
Description: Student may contact the instructor or department for information.

CPsy 5413 Early Childhood and Public Policy
3 credit(s);
Instructor: Slawik, Nora B
Description: If you want to learn directly from legislators, early education professionals, economists, lobbyists and other social scientists about state, federal and international policies affecting young children and their families this class is essential. We will explore readings and expert speaker presentations on family, community and institutional roles in promoting children's social, cognitive and emotional development and their acquisition of language and pre-literacy skills. This course illuminates the gaps between the science of early childhood development and how public policies support young children and their caregivers. Classroom discussions will focus on innovative public policies and financing affecting young children and their physical and mental health care, poverty influences, quality child care, economics, special needs and workforce issues. Graduate students in the areas of early childhood and public policy as well as community members with experience in the early childhood field are the intended audience. This class is the cornerstone of the Early Childhood Policy Certificate program, a postbaccalaureate sequence intended to develop individuals' capacity to apply
research-informed knowledge of early development to federal and state policy affecting children up to age 8.

**Style:** 20% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 20% Guest Speakers. Experts in the areas related to young children speak regularly on kindergarten readiness, statistical preschool studies, legislation, poverty, economics and workforce issues.

**Grading:** 40% reports/papers, 10% special projects, 30% written homework, 10% attendance, 10% class participation. Class attendance also weighs into the final grade if the student misses more than two of the weekly classes.

**CPsy 5501 Foundations in Infant and Early Childhood Mental Health I**
- A-F only, 3 credit(s);
- Instructor: Carlson, Elizabeth Anne
- **Description:** Student may contact the instructor or department for information.

**CPsy 5511 Infant Observation Seminar III**
- OPT No Aud, 1 credit(s);
- Instructor: Carlson, Elizabeth Anne
- **Description:** Student may contact the instructor or department for information.

**CPsy 5518 Prevention and Intervention in Infant and Early Childhood Mental Health I**
- A-F only, 3 credit(s);
- Instructor: Carlson, Elizabeth Anne
- **Description:** Student may contact the instructor or department for information.

**CPsy 5523 Reflective Supervision in Infant and Early Childhood Mental Health: Community-based**
- S-N only, 1 credit(s);
- Instructor: Schultz, Susan Kristine
- **Description:** Student may contact the instructor or department for information.

**CPsy 8301 Developmental Psychology: Cognitive Processes**
- 4 credit(s);
- Instructor: Thomas, Kathleen M
- **Description:** Overview: This course will provide a general overview of the primary issues, methods, and findings in the field of cognitive development. We will examine the development of processes involved in perception, language, knowledge acquisition, reasoning, and the control of behavior, including consideration of the sociocultural context in which these processes develop. The course will begin with a review of some major theories of cognitive development and the empirical observations on which they are based. Current issues & findings will be introduced with reference to these theories. Some background in the scientific study of child development is assumed. Class Format: Typically, the instructors will lecture on Tuesday of each week and lead a seminar discussion on the same topic on Thursday. Students will be expected to participate in the seminar discussions.
- **Style:** 60% Lecture, 30% Discussion, 10% Student Presentation.
- **Grading:** 30% mid exam, 30% final exam, 25% reflection paper, 10% in-class presentation, 5% class participation.
- **Exam Format:** Take-home essay exam

**CPsy 8311 Landmark Issues and Great Controversies in Child Development**
- S-N only, 2 credit(s);
- Instructor: Zelazo, Philip David
- **Description:** Student may contact the instructor or department for information.

**CPsy 8321 Seminar in Teaching Developmental Psychology**
- 1 credit(s);
- Instructor: Elieff, Chryle Ann
- **Description:** Student may contact the instructor or department for information.

**CPsy 8980 Research Seminar in Child Psychology**
- 1-3 credit(s), max credits 15, 15 completions allowed;
- Instructor: Maratos, Michael P
- **Description:** Student may contact the instructor or department for information.

**CPsy 8994 Research Problems in Child Psychology**
- 1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Cicchetti PhD, Dante
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Maratosos, Michael P
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Masten, Ann S.
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Georgieff, Michael K
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Thomas, Kathleen M
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Roisman, Glenn I
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Yonas, Albert
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Sera PhD, Maria D
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Crick, Nicki R
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Collins, W Andrew
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Egeland, Byron R
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Gunnar PhD, Megan R
Description: Student may contact the instructor or department for information.
CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Sroufe, L. Alan
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Yussen, Steve
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Karatekin, Canan
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Gewirtz, Abigail
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Reynolds, Arthur J.
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Zelazo, Philip David
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Carlson, Stephanie M
Description: Overview: This course will provide a general overview of the primary issues, methods, and findings in the field of cognitive development. We will examine the development of processes involved in perception, language, knowledge acquisition, reasoning, and the control of behavior, including consideration of the sociocultural context in which these processes develop. The course will begin with a review of some major theories of cognitive development and the empirical observations on which they are based. Current issues & findings will be introduced with reference to these theories. Some background in the scientific study of child development is assumed. Class Format: Typically, the instructors will lecture on Tuesday of each week and lead a seminar discussion on the same topic on Thursday. Students will be expected to participate in the seminar discussions.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Koenig, Melissa
Description: Student may contact the instructor or department for information.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Mazzocco, Michele M
Description: Student may contact the instructor or department for information.

Child and Adolescent Psychiatry  F-256/2b West

CAPy 5666 Aggression and Conduct Problems in Children and Adolescents
1 credit(s);
Instructor: Bloomquist PhD, Michael Leonard
Description: This course begins with a description of the characteristics, developmental course, and associated risk factors that are seen in children with aggression and conduct problems. The biological, parent/family, social/peer, and contextual (e.g., neighborhood,
school, societal, etc.) causes and correlates will be reviewed. The major emphasis of the course is the delineation of a developmentally focused, multi-systemic model of evidence-based intervention that comprehensively focuses on reducing risks and promoting protective factors in child, parent/family, social/peer, and contextual life domains. This includes discussion of social competence training procedures, mental health interventions (including medications), and academic skills building strategies, parent and family skills training, and various school and community interventions. Multicomponent and coordinated service models of comprehensive intervention will be highlighted. Finally, the course will address strategies for engaging families in intervention, and making interventions culturally compatible.

**Chinese 220 Folwell Hall**

**Chn 1011 Beginning Modern Chinese**

- 6 credit(s); Credit will not be granted if credit has been received for: CHN 4001;
- **Instructor:** Li, Chi-Ping
- **Description:** Student may contact the instructor or department for information.

**Chn 1011 Beginning Modern Chinese**

- 6 credit(s); Credit will not be granted if credit has been received for: CHN 4001;
- **Instructor:** Wang, Ling
- **Description:** This is the first semester of a two-semester sequence in first-year modern Standard Chinese (Mandarin) for undergraduate students who are non-heritage speakers of Chinese. Students are introduced to the sounds of Mandarin, basic grammar, vocabulary, and the Chinese writing system. The course consists of two lectures and five recitation classes per week. By the end of the first semester, students are expected to be able to write about 270 Chinese characters, recognize about 400 characters, conduct a basic conversation, read simple texts or conversations, and write some correct sentences in Chinese. Textbook: "Integrated Chinese," Level One, Part One, Tao-chung Yao, et. al., Cheng & Tsui Company / 2009
- **Style:** 30% Lecture, 70% Discussion.
- **Grading:** 10% mid exam, 15% final exam, 15% quizzes, 20% laboratory evaluation, 25% other evaluation. Homework; 15% Tests
- **Exam Format:** Listening, reading, writing, and oral interview

**Chn 1015 Accelerated Beginning Modern Chinese**

- 5 credit(s); Oral/aural skills or speaker of other Chinese dialect recommended credit will not be granted if credit received for: 1011 or 1012; Credit will not be granted if credit has been received for: CHN 4005;
- **Instructor:** Stone, Jin YaLiang
- **Description:** Prerequisite: instructor's consent; credit will NOT be granted if credit received for: 1011 or 1012; 5 cr Instructor: Stone, Jin This course is designed for heritage speakers of Chinese and for students who have the basic skill of speaking Chinese. The course will focus on standard pronunciation, reading, and writing, and spend less time on grammatical explanation. The lectures cover Chinese characters and sentence structures. In the drill session, we will practice the skills of listening comprehension, speaking, reading, and writing. Since this is an accelerated course, we will cover the whole of first-year Chinese within one semester, and the pace of the course will be approximately one lesson every two days. By the end of the semester, students should be able to make fluent conversations in Chinese, recognize 600 Chinese characters, write 500 of them, and read texts that are clear and straightforward. The course URL is: http://www.all.umn.edu/chinese_language/Courses/class_list.html Textbook: "Integrated Chinese", Level One, Part One and Part Two, by Tao-chung Yao, Yuehua Liu et al, published by Cheng & Tsui Company, 2nd Edition, 2005. Chinese Program URL: http://www.all.umn.edu/chinese_language Class time: 30% lecture, 60% discussion, 10% Video and other multi-media Work load: 10 pages of reading per week, 2-3 pages of writing per semester, exam(s), written homework Grade: 10% attendance and class participation, 5% vocabulary quizzes, 15% quizzes and tests, 10% homework, 30% Mid-term, 30% Final If you have any question regarding this course, please contact the instructor by emailing or calling the instructor.

**Chn 3021 Intermediate Modern Chinese**

- 5 credit(s); 1012 or 1015 or equiv or instr consent Credit will not be granted if credit has been received for: CHN 4003;
- **Instructor:** Li, Chi-Ping
- **Description:** This is the first half of a two-semester sequence in second year modern standard Chinese (Mandarin). It is designed for students who have completed Chn 1012 or 1015 at the U of M, or the equivalent. It will help students improve their ability to understand, speak, read, and write Chinese, and particularly aims at helping students enlarge their vocabulary and learn more complex sentence structures. Students will also be trained to write good compositions to express their views. Those who have not completed Chn 1012 or 1015 at the U of M, but wish to enroll in this course, need the instructor's approval. Textbook: "Integrated Chinese", by Yuehua Liu, et al, Cheng & Tsui Company, 1997.

**Chn 3031 Advanced Modern Chinese**

- 4 credit(s); 3022 or equiv or instr consent Credit will not be granted if credit has been received for: CHN 4007;
- **Instructor:** Li, Chi-Ping
Chn 3031 Advanced Modern Chinese
4 credit(s); 3022 or equiv or instr consent  Credit will not be granted if credit has been received for: CHN 4007;
Instructor: Hung, Yun-Lin
Description: Student may contact the instructor or department for information.

Chn 3201 Chinese Calligraphy
2 credit(s);
Instructor: Zhang, Hong
Description: A beginning course in Chinese Calligraphy. Chinese language background is NOT required. Lectures include introducing various Chinese Calligraphy techniques and exposing students to Chinese Calligraphy history and the cultural background in general. Students will be taught to develop a sense of self-cultivation through practicing the art of Chinese Calligraphy. Exercises in the class will give students hands-on experience of proper use of Chinese brush and ink to perform Chinese calligraphy. Students will also have the opportunity to write a complete calligraphy art project in terms of Chinese Couplets, Chinese Poems. In addition, students will be taught to understand the literature and the meaning of the calligraphy projects. The Calligraphy book is written by the instructor.
Style: 30% Lecture, 10% Discussion. Classroom exercises, with instructor's coaching students individually
Grading: 30% special projects, 30% written homework, 30% attendance, 10% class participation.

Chn 3290 Chinese Language Teaching Tutorial
S-N only, 1 credit(s), max credits 2;
Instructor: Wang, Ling
Description: This course is aimed at providing excellent Chinese learners with experience in tutoring beginning Chinese learners. This course will give a brief introduction to theoretical concepts of Chinese pedagogy and the strategies in tutoring. Students are required to know how to share expertise, experience in learning and how to encourage beginning learners to learn Chinese. Field notes should be taken each time when student provides tutoring. Student needs to write a report and reflection on his/her tutoring experience. No. of credits: S-N only, 1 credit(s), max credits 2 Prereq: Grade of A in 3032 Work load: some readings in Chinese pedagogy, tutoring for one or two hours per week, Grade: 40% discussion with the instructor 60% written reporting on tutoring experience

Chn 4001 Beginning Modern Chinese
3 credit(s);Grad studentCredit will not be granted if credit has been received for: CHN 1011;
Instructor: Li, Chi-Ping
Description: Student may contact the instructor or department for information.

Chn 4001 Beginning Modern Chinese
3 credit(s);Grad studentCredit will not be granted if credit has been received for: CHN 1011;
Instructor: Wang, Ling
Description: Student may contact the instructor or department for information.

Chn 4003 Intermediate Modern Chinese
3 credit(s); 4002, grad studentCredit will not be granted if credit has been received for: CHN 3021;
Instructor: Li, Chi-Ping
Description: This is the first half of a two-semester sequence in second year modern standard Chinese (Mandarin). It is designed for students who have completed Chn 1012 or 1015 at the U of M, or the equivalent. It will help students improve their ability to understand, speak, read, and write Chinese, and particularly aims at helping students enlarge their vocabulary and learn more complex sentence structures. Students will also be trained to write good compositions to express their views. Those who have not completed Chn 1012 or 1015 at the U of M, but wish to enroll in this course, need the instructor's approval. Textbook: "Integrated Chinese", by Yuehua Liu, et al, Cheng & Tsui Company, 1997.

Chn 4005 Accelerated Beginning Modern Chinese
3 credit(s);Grad student, instr consent ; oral/aural skills or other Chinese dialect recommended credit will not be granted if credit received for: 1011, 1012Credit will not be granted if credit has been received for: CHN 1015;
Instructor: Stone, Jin Yaliang
Description: Prerequisite: instructor's consent; credit will NOT be granted if credit received for: 1011 or 1012.; 5 cr Instructor: Stone, Jin This course is designed for heritage speakers of Chinese and for students who have the basic skill of speaking Chinese. The course will focus on standard pronunciation, reading, and writing, and spend less time on grammatical explanation. The lectures cover Chinese characters and sentence structures. In the drill session, we will practice the skills of listening comprehension, speaking, reading, and writing. Since this is an accelerated course, we will cover the whole of first-year Chinese within one semester, and the pace of the course will be approximately one lesson every two days. By the end of the semester, students should be able to make
fluent conversations in Chinese, recognize 600 Chinese characters, write 500 of them, and read texts that are clear and straightforward. The course URL is: http://www.all.umn.edu/chinese_language/Courses/class_list.html Textbook: "Integrated Chinese", Level One, Part One and Part Two, by Tao-chung Yao, Yuehua Liu et al, published by Cheng & Tsui Company, 2nd Edition, 2005. Chinese Program URL: http://www.all.umn.edu/chinese_language Class time: 30% lecture, 60% discussion, 10% Video and other multi-media Work load: 10 pages of reading per week, 2-3 pages of writing per semester, exam(s), written homework Grade: 10% attendance and class participation, 5% vocabulary quizzes, 15% quizzes and tests, 10% homework, 30% Mid-term, 30% Final If you have any question regarding this course, please contact the instructor by emailing or calling the instructor.

Chn 4007 Advanced Modern Chinese
3 credit(s);4004, grad studentCredit will not be granted if credit has been received for: CHN 3031;
Instructor: Li,Chi-Ping
Description: Student may contact the instructor or department for information.

Chn 4041 Advanced Readings in Modern Chinese
4 credit(s);
Instructor: Wang,Ling
Description: This course will expose advanced students to various contemporary Chinese writings and improve their ability to read Chinese writings in the original and write articles in Chinese. The hope is that this will inspire students to further explore contemporary Chinese culture and society. In this course we will study Chinese writings of different styles in contemporary China, including short stories and essays written since 1949 to the present. These writings reflect Chinese society since the early 1950s. The course will also expose students to newly emerged Internet writing. The lectures and discussions will focus on the use of the language, the contents of the writings, and their reflection of contemporary Chinese society. At the same time, we will also try to explore the Chinese cultural and philosophical meanings found in those works. The course will be taught in Modern Standard Chinese (Mandarin). Reading Packet: ??? ????????? by Dr. Zou, Zhen (??Dinky Dome ??Paradigm Course Resource??) Course website:
http://www.all.umn.edu/chinese_language/Courses/class_list.html Course Requirement: Pre-class preparation is critical in this course before each class; students are expected to study assigned readings. Please familiarize yourself with the new words of the reading text and try to answer the questions on the text so that you can contribute to class discussion. Grading Attendance and performance - 10% Portfolio of articles - 15% Quiz -10% Howework - 15% Presentation -10% Midterm - 10% Final - 15% Course paper -15%

Chn 5040 Readings in Chinese Texts
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Zou,Zhen
Description: Prerequisite: 3-4 years of college Chinese or equivalent or instructor consent Instructor: Zou, Zhen In the fall semester, the contents of the Chinese 5040 course include contemporary Chinese short stories, novelettes, and prose written since 1949 to the present, especially in the 1980s, 1990s, and 2000s, a peak time of Chinese literature since China’s reform and open to the world. These literary works explore various aspects of contemporary Chinese society, history, and culture, including social prejudices against the mentally and physically disadvantaged, the Anti-Rightist Movement, the Cultural Revolution, the drug problem, male-female relationship, education, parental love (and lack thereof), traditional Chinese view of life, rape and sex, and hot issues discussed in Taiwan. Class discussion will focus on the use of the language, the social interpretation of the texts, and the Chinese cultural and philosophical messages found in those works. The course will be taught in standard modern Chinese (Mandarin). Class time: 65% Discussion, 30% Lecture, 5% Lab, film and internet. Work load: 5-10 Pages of reading per week, quizzes, 2 exams, oral reading presentation, and a final essay. Grade: 15% class participation, 15% quizzes, 20% midterm exam, 20% final exam, 10% reading presentation, 20% final essay. Exam format: Short answers and essay questions. Course URL:
http://www.all.umn.edu/chinese_language

Chn 5393 Directed Study
1-5 credit(s), max credits 18, 18 completions allowed;
Instructor: Allen,Joseph R
Description: Student may contact the instructor or department for information.

Chn 5393 Directed Study
1-5 credit(s), max credits 18, 18 completions allowed;
Instructor: Zou,Zhen
Description: Student may contact the instructor or department for information.
Chn 5393 Directed Study
1-5 credit(s), max credits 18, 18 completions allowed;
Instructor: Rouzer, Paul F
Description: Student may contact the instructor or department for information.

Civil Engineering 122 Civil Engineering Building

CE 1101 Civil Engineering Orientation
S-N only, 1 credit(s);
Instructor: Marasteanu, Mihai
Description: Student may contact the instructor or department for information.

CE 3101 Computer Applications in Civil Engineering I
A-F only, 3 credit(s);
Instructor: Barnes, Randal J
Description: Student may contact the instructor or department for information.

CE 3102 Uncertainty and Decision Analysis in Civil Engineering
A-F only, 3 credit(s);
Instructor: Davis, Gary Arnold
Description: Student may contact the instructor or department for information.

CE 3111 CADD for Civil Engineers
S-N only, 2 credit(s);
Instructor: Johnson, Ann M
Description: Introduction to AutoCAD and Civil 3D software. Students complete all tasks to design a two-lane roadway and simple subdivision using civil engineering design software, including topography, plan/profile, contours, and cross sections.

CE 3201 Transportation Engineering
3 credit(s);
Instructor: Levinson, David M
Description: The plot of the course is "How does an idea become a road". It begins with transportation planning (where ideas for roads (or other transportation facilities) are generated, proceeds to queueing, traffic flow analysis, and level of service, where the size (width) of the road is determined. CE3201 comprises two components: lecture, which meets twice a week for 50 minutes, and lab (section) which meets three times a week for 50 minutes, though each student is in one of three sections. The lab employs computer-based simulations to allow students to "learn by doing" and get a different perspective on transportation engineering than solving homework problems provides. Each lecture includes both traditional lecture component, to convey material, highlight important points, and review questions students may have, and in-class problems, to attempt to engage students in active learning.
Style: 35% Lecture, 10% Discussion, 35% Laboratory, 15% Student Presentation, 5% Guest Speakers.
Grading: For CE3201, there are six "wedges" which each must be achieved. These are: Homework, Lab, Project, Participation, Quizzes, Final Exam. In order to fill a wedge, you need to obtain at least 2/3 of possible points.
Exam Format: In-class, Closed book, with equations provided. Short answer plus problems.

CE 3202 Surveying and Mapping
A-F only, 2 credit(s);
Instructor: Johnson, Ann M
Description: Theory of precision measurements of distance, elevation, angle, and direction of points and lines above, on, or beneath the earth's surface; establishing such points or lines. Elements of coordinate systems, datum planes, and maps.

CE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Guzina, Bojan B
Description: The mechanics of soils forms the basis of geotechnical engineering involving the design of civil engineering structures such as foundations, retaining walls, dams and slopes. The course focuses on the fundamentals of soil mechanics and covers the topics such as index properties of soils and their classification, consolidation of saturated soils due to one-dimensional compression, partition of stresses between the soil particles and water, stress distribution in soil deposits due to foundation loads, permeability and seepage. Text: B.M. Das, "Fundamentals of Geotechnical Engineering."
CE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Guzina, Bojan B
Description: Student may contact the instructor or department for information.

CE 3401 Linear Structural Analysis
A-F only, 3 credit(s);
Instructor: Wojtkiewicz Jr, Steven F
Description: Student may contact the instructor or department for information.

CE 3402W Civil Engineering Materials
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Marasteanu, Mihai
Description: Student may contact the instructor or department for information.

CE 3501 Environmental Engineering
A-F only, 3 credit(s); Meets CLE req of Environment
Instructor: Novak, Paige J
Description: This course is an introduction to the field of environmental engineering. It is for undergraduate majors and non-majors. The course covers topics of global climate change, solid and hazardous waste treatment, air pollution, and water and wastewater treatment. A discussion of mass and energy balances and basic chemistry and microbiology is also presented.
Style: 75% Lecture, 25% Discussion.
Grading: 60% mid exam, 10% reports/papers, 10% quizzes, 20% problem solving.
Exam Format: Short answer and problems

CE 3502 Fluid Mechanics
A-F only, 4 credit(s);
Instructor: Hill, Kimberly M.
Description: Student may contact the instructor or department for information.

CE 4000H Honors Research Seminar
A-F only, 1 credit(s), max credits 2; Upper div CECredit will not be granted if credit has been received for: GEOE 4000H;
Instructor: Barnes, Randal J
Description: Student may contact the instructor or department for information.

CE 4092H Honors Selected Reading
A-F only, 1 credit(s), max credits 2; Upper div CE, honors Credit will not be granted if credit has been received for: GEOE 4092H;
Instructor: Barnes, Randal J
Description: Student may contact the instructor or department for information.

CE 4094H Senior Honors Thesis
A-F only, 2 credit(s); Upper div CECredit will not be granted if credit has been received for: GEOE 4094H;
Instructor: Barnes, Randal J
Description: Student may contact the instructor or department for information.

CE 4102W Capstone Design
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Strack PhD, Otto D
CE 4190 Engineering Co-op Assignment
S-N only, 2-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gulliver, John Stephen
Description:
Style: Industry work assignment
Grading: 100% reports/papers.

CE 4251 Pavement Analysis, Design, and Rehabilitation
4 credit(s);
Instructor: Khazanovich, Lev
Description: Student may contact the instructor or department for information.

CE 4301 Soil Mechanics II
A-F only, 3 credit(s); [3301 or GeoE 3301], upper div CSE or instr consent Credit will not be granted if credit has been received for: GEOE 4301;
Instructor: Gonella, Stefano
Description: Student may contact the instructor or department for information.

CE 4301 Soil Mechanics II
A-F only, 3 credit(s); [3301 or GeoE 3301], upper div CSE or instr consent Credit will not be granted if credit has been received for: GEOE 4301;
Instructor: Gonella, Stefano
Description: Student may contact the instructor or department for information.

CE 4311 Rock Mechanics
A-F only, 4 credit(s);
Instructor: Labuz, Joseph F
Description: Student may contact the instructor or department for information.

CE 4351 Groundwater Mechanics
A-F only, 3 credit(s); [3502, [upper div CSE or grad student]] or instr consent Credit will not be granted if credit has been received for: GEOE 4351;
Instructor: Strack PhD, Otto D
Description: Student may contact the instructor or department for information.

CE 4401 Steel and Reinforced Concrete Design
A-F only, 4 credit(s);
Instructor: Shield, Carol K
Description:
Style: 90% Lecture, 10% Small Group Activities.
Grading: 20% mid exam, 20% final exam, 40% written homework, 20% additional semester exams.
Exam Format: two 1 hour exams, one two-hour in-class midterm and one two-hour final exam

CE 4413 Steel Design II
A-F only, 3 credit(s);
Instructor: Le, Jialiang
Description: Student may contact the instructor or department for information.

CE 4501 Hydrologic Design
A-F only, 4 credit(s);
Instructor: Mohseni, Omid
Description: Student may contact the instructor or department for information.

CE 4502 Water and Wastewater Treatment
A-F only, 3 credit(s);
Instructor: Martenson, Dennis Raymond
CE 5180 Special Topics  
A-F only, 1-4 credit(s), max credits 4, 3 completions allowed;  
Instructor: Mohan, Ned  
Description: Student may contact the instructor or department for information.

CE 5212 Transportation Policy, Planning, and Deployment  
4 credit(s); 3201 or equivCredit will not be granted if credit has been received for: PA 5232;  
Instructor: Levinson, David M  
Description: This course aims to provide an environment for students to learn essential facts and develop models and frameworks to understand the development of transportation policy, the making of transportation plans, and the deployment of transportation technologies. The course uses a mixture of traditional lectures (generally on Mondays), and interactive learning through case studies and role playing (generally on Wednesdays). Both the lectures and the cases allow the students to develop an inductive understanding of transportation. The course will be successful if at the end, the student has developed a worldview on transportation (not necessarily the same as the instructor’s), and has an appreciation for merits and demerits of various points of view on transportation issues. The course seeks an integrative approach for transportation, and though the stories in lecture will be told mode by mode, there are a number of opportunities to see the relationships between modes, in their structure in function, and in the learning as one mode adopts successful (and unsuccessful) attributes of others.  
Style: 50% Lecture, 50% Discussion.  
Grading: 20% mid exam, 20% final exam, 40% reports/papers, 20% class participation.

CE 5351 Advanced Mathematics for Civil Engineers  
A-F only, 3 credit(s);  
Instructor: Strack PhD, Otto D  
Description: Student may contact the instructor or department for information.

CE 5411 Applied Structural Mechanics  
A-F only, 3 credit(s);  
Instructor: Stolarski, Henryk Konstanty  
Description: Stresses and strain analysis, failure criteria in 3 dimensions. Introduction to plane elasticity, application of the energy methods and stress functions. Torsion of prismatic bars, bending of unsymmetrical beams, shear centers for thin-walled cross sections.

CE 5414 Prestressed Concrete Design  
A-F only, 3 credit(s);  
Instructor: Dymond, Ben  
Description: Student may contact the instructor or department for information.

CE 5415 Masonry Structures  
A-F only, 3 credit(s);  
Instructor: Schultz, Arturo Ernest  
Description: Student may contact the instructor or department for information.

CE 5541 Environmental Water Chemistry  
A-F only, 3 credit(s), max credits 4, 1 completion allowed;  
Instructor: Arnold, Bill  
Description: Water is critical component of environmental systems, and the chemistry that occurs in water is a rich subject. This class focuses on water chemistry in both natural and engineered systems. Topics covered include acids and bases, titrations, the carbonate system, solubility of minerals, metal ion complexation, oxidation/reduction chemistry, chemistry in water treatment, nutrient cycling, organic matter, and organic pollutants. Both chemical equilibrium and chemical kinetics are explored. Students will be introduced to software that can be used to solve water chemistry problems. The class is targeted at seniors and graduate students.  
Style: 100% Lecture.  
Grading: 40% mid exam, 30% final exam, 30% written homework.  
Exam Format: in class, closed book

CE 5551 Environmental Microbiology  
A-F only, 3 credit(s);
Instructor: Novak, Paige J
Description: Student may contact the instructor or department for information.

CE 5552 Environmental Microbiology Laboratory
A-F only, 1 credit(s);
Instructor: Novak, Paige J
Description: Student may contact the instructor or department for information.

CE 5571 Design for Sustainable Development: Innovate
A-F only, 4 credit(s), max credits 8;
Instructor: Gulliver, John Stephen
Description: Hands-on training in evaluating technologies to improve health and quality of life in developing countries through design thinking and implementation. Students work in teams, and in cooperation with students in India, to survey a low-income community in India, select a technology or a service that is needed by that community, and design a business to serve the community. Teams will enter the Acara Challenge http://acara.environment.umn.edu/acarachallenge with the opportunity to be funded to implement their solution in India. Applications must be submitted to John Gulliver <gulli003@umn.edu> in order to participate in the course.

CE 8200 Seminar: Transportation
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Levinson, David M
Description: Student may contact the instructor or department for information.

CE 8300 Seminar: Geomechanics
S-N only, 1-3 credit(s), max credits 4, 4 completions allowed; Credit will not be granted if credit has been received for: GEOE 8300;
Instructor: Gonella, Stefano
Description: Student may contact the instructor or department for information.

CE 8400 Seminar: Structures
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Schultz, Arturo Ernest
Description: Student may contact the instructor or department for information.

CE 8421 Structural Dynamics
A-F only, 3 credit(s);
Instructor: Stolarski, Henryk Konstanty
Description: Student may contact the instructor or department for information.

CE 8443 Fracture of Materials and Structures
A-F only, 3 credit(s);
Instructor: Ballarini PhD, Roberto
Description: Student may contact the instructor or department for information.

CE 8500 Environmental Seminar
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Marshall, Julian
Description: Student may contact the instructor or department for information.

CE 8508 Ecological Fluid Mechanics
A-F only, 4 credit(s);
Instructor: Hondzo, Miki
Description: Student may contact the instructor or department for information.

CE 8521 The Atmospheric Boundary Layer
A-F only, 4 credit(s);
Instructor: Guala, Michele
Description: Student may contact the instructor or department for information.
CE 8601 Introduction to Stream Restoration
A-F only, 3 credit(s);
Instructor: Voller, Vaughan Richard
Description: Student may contact the instructor or department for information.

Classical Civilization 245 Nicholson Hall

CICv 3993 Directed Studies in Classical Civilization
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

CICv 3994 Directed Research in Classical Civilization
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Classical and Near Eastern Studies 245 Nicholson Hall

CNES 1002 World of Greece
3 credit(s); Meets CLE req of Historical Perspectives
Instructor: STAFF
Description: This course is an introduction to the culture, literature, history and art of ancient Greece from the Bronze Age (ca. 2000 BCE) to the end of the Hellenistic period (31 BCE). We will look at ancient literary, artistic and archaeological sources as evidence for how the Greeks went about their daily lives and understood the larger world in which they lived. We will explore topics such as history, warfare, religion, love and family, identity, political systems, sexuality and many others. The roots of Western Civilization reach back to ancient Greece; exploring those traditions will give students a new appreciation for how the culture of modern America relates to this exciting period.
Grading: 30% mid exam, 40% final exam. 2 midterms, 1 final exam
Exam Format: short-answer essays (all), long essay (final only), true/false, multiple choice, map and date identifications. Exams are not cumulative except for the long essay on the final.

CNES 1042 Greek and Roman Mythology
4 credit(s); Credit will not be granted if credit has been received for: CNES 1042H; Meets CLE req of Arts/Humanities
Instructor: Krevans, Nita
Description: A survey of Greek and Roman mythology, including near eastern parallels and influences. We will use both ancient and modern primary sources to study the gods, heroes and monsters whose stories continue to influence the production of art and literature in the modern world. Readings include Greek tragedy, Homer, the epic of Gilgamesh, and Ovid, as well as extended excerpts from numerous ancient authors. Lectures include slides and film clips to permit an understanding of visual representations of the mythic world. Students will analyze a modern adaptation of a myth for their final project.
Style: 50% Lecture, 50% Discussion. Two lectures and one seminar-style discussion each week. This class has an associated evening film series; students who cannot make the film times have other options for viewing.
Grading: 20% mid exam, 30% final exam, 15% reports/papers, 35% class participation.
Exam Format: short answer/essay

CNES 1042 Greek and Roman Mythology
4 credit(s); Credit will not be granted if credit has been received for: CNES 1042H; Meets CLE req of Arts/Humanities
Instructor: Fanning, Eric William
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit Class URL for ODL policies, including fee and financial aid restrictions. Introduction to stories/study of Greek/Roman mythology.
Style: Online with handwritten exams
Grading: 15% mid exam, 20% final exam, 35% reports/papers, 30% quizzes.
Exam Format: Exams are in-person, not online.

CNES 1042H Honors Course: Greek and Roman Mythology
A-F only, 4 credit(s); Honors or instr consent Credit will not be granted if credit has been received for: CNES 1042; Meets CLE req of Arts/Humanities
Instructor: Krevans, Nita
**CNES 1046 Technical Terminology for the Health Professions**

*3 credit(s)*; Credit will not be granted if credit has been received for: RELS 3201; Meets CLE req of Civic Life and Ethics

**Instructor:** Willey, Andrew James

**Description:** This is a fully online section offered online through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Although only used in a specialized, technical environment, medical terminology is nevertheless a vocabulary in its own right, with its own history and rules of morphology (word-formation). This course emphasizes linguistics and etymology. Rather than attempt to impart all the specialized vocabulary necessary for the study of, e.g. anatomy or physiology, you will learn how medical terms are constructed from Greek and Latin prefixes, roots, and suffixes. You will also learn by heart most of the commonly found roots of medical terms. Armed with this knowledge, you will have the skills and knowledge to "decode" or "translate" unfamiliar terms as you come upon them. In addition, you will also possess a solid base of vocabulary to build upon—whatever your future involvement in the health professions may be, as a doctor, nurse, occupational therapist, or simply as an occasional patient.

**Style:** Online with handwritten exam

**Grading:** 40% final exam, 60% quizzes.

**Exam Format:** Supervised, in-person (not online) exam.

**CNES 1201 The Bible: Context and Interpretation**

*3 credit(s)*; Credit will not be granted if credit has been received for: RELS 3201; Meets CLE req of Literature

**Instructor:** STAFF

**Description:** Where did the Hebrew Bible ("Old Testament") come from? In what way do the worldviews and traditions expressed by its ancient authors compare with those of the superpowers of their day, including the Canaanites (from Ugarit), the Hittites, the Egyptians, and the Mesopotamians? How did the text of the Hebrew Bible come to represent a millennium of beliefs, desires, and customs from ancient Israel and Judah, many of which still reverberate in our society today? Integrating a cross-disciplinary spectrum of religion, history, and literature, students in this class will read, analyze, and interpret Hebrew Bible texts in English, using methods employed by biblical scholars. This class fulfills the Liberal Education Requirement of Literature because in it students read the Hebrew Bible as ancient literature, asking questions about language and meaning, literary effects, and the Hebrew Bible's social and historical contexts. Since we will engage in secular study only, analytically examining all relevant religious texts and traditions, students are required to have an open mind and willingness to read and discuss the Bible in a new way.

**CNES 1903 Freshman Seminar: Famous Trials in History**

*3 credit(s); Meets CLE req of Civic Life and Ethics*

**Instructor:** Sheets, George A

**Description:** Trials, especially criminal trials, are formal occasions in which societies publicize and vindicate their normative conceptions of right and wrong. Sometimes the specific factual and legal questions raised at a trial are less important than larger social and political issues that are at stake in the trial’s outcome. Historically, trials can become famous (or infamous) long after they have occurred because they come to be interpreted as milestones in the narratives of history. This seminar will examine thirteen such trials. We will aim to: 1. learn about the trial defendants: who they were, when and where they lived, why they were put on trial and what happened to them; 2. consider the social and political interests that were at stake in the trials; and 3. discuss representations of the trials we study in art (principally film) and history.

**Style:** 25% Lecture, 30% Film/Video, 45% Discussion. Class discussion is central to the work of this course. 25% of the course grade is based on the quality and regularity of your participation in the discussion.

**Grading:** 25% reports/papers, 50% special projects, 25% class participation.

**CNES 3072 The New Testament**

*3 credit(s); Credit will not be granted if credit has been received for: RELS 3072;*

**Instructor:** STAFF

**Description:** Was Jesus a Christian or a Jewish prophet? Did later interpreters distort the simple religion of this Galilean charismatic teacher who spoke of the essence of a true religion? Was Paul an anti-feminist or a woman's liberationist? Was he an anti-Semite or a Jew on the margins and one of the most creative thinkers of the early Jesus movement? How did the early church select its scriptures?
for a New Testament? And why and how were only four gospels selected and many others excluded? These and other questions we will pose in this historical study of the New Testament in its Graeco-Roman and Jewish context. The course will emphasize the nature and variety of religious expression in the early Church; it will treat the gospels in their historical setting, and it will study selected heated discourses between Paul and his churches in a treatment of his letters as conversations. It will also deal with some early interpreters of Paul in the New Testament, and will consider the message of Revelation for a persecuted church. The course will finally sample texts from the Gnostic Gospels of the second century.

**CNES 3081W Classical Epic in Translation**

**3 credit(s);Credit will not be granted if credit has been received for:** CLAS 3081W;Meets CLE req of Literature; meets CLE req of Writing Intensive

**Instructor:** Smith, Stephen

**Description:** Epic poetry is the oldest and perhaps grandest genre of European literature, with written works dating from 2,700 years ago and roots extending back centuries beyond that. These poems focus on the deeds of heroes, gods, and sometimes monsters in a world of grandeur and passion; they can extend over several years, ranging over the length and breadth of the Mediterranean Sea, or they can cover just a few weeks on the plain before a great city. In this course we will be focusing on three of the great epics—the Iliad and Odyssey of "Homer" and the Aeneid of Vergil. The Iliad and the Odyssey were first put down on paper around 750-700 BCE, but they were the culmination of a centuries-long oral tradition. The Iliad is the story of the wrath of Achilles, the greatest of the Greek warriors besieging the city of Troy—a man of towering, godlike power and anger, but a man doomed to die all the same. The Odyssey tells of Odysseus, cleverest of the Greeks, and his ten-year journey to return home after the fall of Troy; it is in part a journey through a mysterious world of giants, monsters, and witches, but it is above all the story of a stalwart man's quest to be reunited with the most faithful of wives. Ever since they were first written down, these poems have been regarded as masterpieces, and the presence of their "author," a man known to us as Homer, was felt by every poet for centuries to come. Seven hundred years later, in the city of Rome, the poet Vergil composed one of the greatest works (if not the greatest) of Latin literature, the Aeneid, which tells of the search of Aeneas, last of the royal house of fallen Troy, for a new home for his people. Like Homer, Vergil cast a long shadow, one stretching to the Renaissance and beyond. In addition to reading and discussing these three poems as individual works, we will also look at the connections between them and at selections from other ancient epics. This is a writing-intensive class: there will be several short papers, and sections will include work on writing techniques. (NOTE: Students are required to use the translations by R. Fagles; other translations will not be accepted.. Quizzes, discussions, and writing assignments will be based on the Fagles translations.)

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 50% reports/papers, 15% quizzes, 35% class participation.

**CNES 3162 Roman Art and Archaeology**

**3 credit(s);Credit will not be granted if credit has been received for:** ARTH 3162;Meets CLE req of Historical Perspectives

**Instructor:** Canepa PhD, Matthew P.

**Description:** This course will provide an introduction to the history of Roman art and archaeology from the formation of the city-state of Rome under Etruscan domination, to the Roman Empire under Augustus, to the transformation of Roman visual culture in late antiquity as the Roman Empire became Christian under Constantine the Great. No background in the time period or discipline is expected and therefore this class will also serve as an introduction to interdisciplinary study of art history and the classical world. A number of art historical methodologies will be introduced in order to not only give the student a useful background in art history but to give him or her the tools to think as historians and incorporate related visual and textual evidence meaningfully into their writing.

**Style:** 80% Lecture, 10% Discussion, 10% Field Trips.

**Grading:** Two midterms and a final (25% each); short papers (20%); attendance (5%).

**Exam Format:** Standard Art History exam: Slide identification, vocabulary and short essay.

**CNES 3201 The Bible: Context and Interpretation**

**3 credit(s);Knowledge of Hebrew not requiredCredit will not be granted if credit has been received for:** RELS 3201;Meets CLE req of Literature

**Instructor:** STAFF

**Description:** The course attempts to "get behind" the overlay imposed by modern culture upon the Old Testament/Hebrew Bible and to read it on its own terms. In order to do so, students will explore the fascinating literature and religion of the ancient Near East. We will read texts from ancient Mesopotamia, Canaan (Ugarit), and Israel, and discuss both the ideas found in them and their literary artistry. After investigating the literature of Israel's neighbors, we will read biblical literature in dialogue with these stories, intellectually analyzing the narratives of the of creation of the world, the origin of life, the great flood story, the idea of divine revelation, and the significance of law. Specific topics to be dealt with include: God, creation, fate, the point of human life, and the meaning of history. The course teaches students how to read closely and to think critically about the meaning of a text. Students will be asked to read primary sources for specific questions of content and meaning, frequently with the help of assignment sheets, and to learn a methodology for deciding between right and wrong answers. The skills thereby learned will assist students with any other course in the Liberal Arts. The assumptions of the course are academic and secular, as required by the First Amendment. All texts and all religious traditions will be examined analytically.
CNES 3951W Major Project
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Asher, Catherine B
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Kilde, Jeanne Halgren
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Sheets, George A
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Olson, S Douglas
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Sellew, Philip
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Schneller, Renana Segal
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Nappa, Christopher
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Smith, Stephen
Description: Student may contact the instructor or department for information.
Instructor: Jassen, Alex P  
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies  
1-4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Cole, Spencer E  
Description: Student may contact the instructor or department for information.

CNES 3993 Directed Studies  
1-4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Canepa PhD, Matthew P.  
Description: Student may contact the instructor or department for information.

CNES 5072 The New Testament  
3 credit(s);  
Instructor: STAFF  
Description: Was Jesus a Christian or a Jewish prophet? Did later interpreters distort the simple religion of this Galilean charismatic teacher who spoke of the essence of a true religion? Was Paul an anti-feminist or a woman's liberationist? Was he an anti-Semite or a Jew on the margins and one of the most creative thinkers of the early Jesus movement? How did the early church select its scriptures for a New Testament? And why and how were only four gospels selected and many others excluded? These and other questions we will pose in this historical study of the New Testament in its Graeco-Roman and Jewish context. The course will emphasize the nature and variety of religious expression in the early Church; it will treat the gospels in their historical setting, and it will study selected heated discourses between Paul and his churches in a treatment of his letters as conversations. It will also deal with some early interpreters of Paul in the New Testament, and will consider the message of Revelation for a persecuted church. The course will finally sample texts from the Gnostic Gospels of the second century.

CNES 5794 Introduction to Classical and Near Eastern Studies  
S-N only, 1 credit(s);  
Instructor: Krevans, Nita  
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies  
1-4 credit(s), max credits 12, 4 completions allowed;  
Instructor: Asher, Catherine B  
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies  
1-4 credit(s), max credits 12, 4 completions allowed;  
Instructor: Kilde, Jeanne Halgren  
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies  
1-4 credit(s), max credits 12, 4 completions allowed;  
Instructor: Sheets, George A  
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies  
1-4 credit(s), max credits 12, 4 completions allowed;  
Instructor: Krevans, Nita  
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies  
1-4 credit(s), max credits 12, 4 completions allowed;  
Instructor: Olson, S Douglas  
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies  
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Sellew, Philip
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Schneller, Renana Segal
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Nappa, Christopher
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Smith, Stephen
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Jassen, Alex P
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Cole, Spencer E
Description: Student may contact the instructor or department for information.

CNES 5993 Directed Studies
1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Canepa PhD, Matthew P.
Description: Student may contact the instructor or department for information.

CNES 8190 Seminar: Issues in Ancient Art and Archaeology
3 credit(s), max credits 12, 4 completions allowed; Credit will not be granted if credit has been received for: ARTH 8190;
Instructor: Canepa PhD, Matthew P.
Description: Topic for Fall 2012: Fire Temples and Sacred Spaces: Contesting Sacred Topographies, Architecture and Ritual in Persia and the Ancient Iranian World. This seminar explores the development, rupture and change in Iranian sacred space, topography, architecture, and royal ritual from the Median through the Sasanian eras (ca. 700 BCE-642 CE). As important subthemes, this seminar will 1) consider historiographical problems surrounding various scholarly constructions of a tradition of Iranian fire temple architecture, paying special attention to the continued influence of Nazi-era scholarship and 2) introduce select contemporary theoretical approaches to natural, architectonic, and ritual inscriptions of space. The seminar considers evidence of sacred space and architecture under the Achaemenid dynasty and appropriation of sacred sites in Egypt, Babylon and Anatolia. It will examine, in particular, the evidence (or lack thereof) for the Achaemenid fire temple. It then considers the impact of the Seleukid Empire on Iranian cultures and religions (broadly defined) and the subsequent emergence of new traditions of sacred architecture and cult under the Arsacids, Kushans, and Sasanians. In addition to considering the transformation of Iranian traditions, it investigates the impact of these new traditions on the Mediterranean and the lands in the interstices, such as Armenia, Pontos and Commagene, which selectively appropriated Greek, Mesopotamian, and Iranian traditions.

Clinical Laboratory Sciences Program 15-194 Phillips Wangensteen Bldg (MMC 711)

CLSP 1010 Orientation in Clinical Laboratory Sciences
S-N only, 1 credit(s);
Instructor: Conway-Klaassen, Janice M.
Description: Student may contact the instructor or department for information.

CLSP 4092 Honors Program: Laboratory Methods
3 credit(s);
Instructor: Conway-Klaassen, Janice M.
Description: Student may contact the instructor or department for information.

CLSP 4102 Principles of Diagnostic Microbiology
A-F only, 2 credit(s);
Instructor: Ruskin, Lorna Marie
Description: Student may contact the instructor or department for information.

CLSP 4103 Diagnostic Microbiology: Laboratory
A-F only, 2 credit(s);
Instructor: Ruskin, Lorna Marie
Description: Student may contact the instructor or department for information.

CLSP 4201 Hematology I
A-F only, 3 credit(s);
Instructor: Wiesner, Stephen Michael
Description: Student may contact the instructor or department for information.

CLSP 4302 Clinical Chemistry I: Lecture and Lab
A-F only, 3 credit(s);
Instructor: Spannaus-Martin, Donna J
Description: Student may contact the instructor or department for information.

CLSP 4401 Immunology
A-F only, 1 credit(s), max credits 2;
Instructor: Wiesner, Stephen Michael
Description: Student may contact the instructor or department for information.

CLSP 4601W Management and Professional Issues
A-F only, 2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Conway-Klaassen, Janice M.
Description: Student may contact the instructor or department for information.

CLSP 4602 Basic Concepts in Education and Research as Applied to the Clinical Laboratory
A-F only, 1 credit(s);
Instructor: Conway-Klaassen, Janice M.
Description: Student may contact the instructor or department for information.

CLSP 4701 Applied Diagnostic Microbiology
S-N only, 2 credit(s);
Instructor: Brennecke, Patricia Johnson
Description: Student may contact the instructor or department for information.

CLSP 4702 Applied Clinical Hematology/Hemostasis
S-N only, 2 credit(s);
Instructor: Brennecke, Patricia Johnson
Description: Student may contact the instructor or department for information.

CLSP 4703 Applied Clinical Chemistry and Urinalysis
S-N only, 2 credit(s);
Instructor: STAFF
Description: Application of basic methods and techniques in the clinical chemistry lab. Upon completion of the chemistry rotation, the student will be able to: Organize and take responsibility for the performance of selected methods. Perform the procedure with limited
supervision, maintain accurate records, while following all prescribed laboratory safety procedures, recognize signs of instrument malfunction, perform necessary corrective measures, and clean up area. Obtain appropriate blood samples by venipuncture. Handle specimens properly once they are received in the laboratory. Understand the principles of clinical chemistry methods presented during the course. Describe the principles of instruments covered during the course. Understand the clinical usefulness of laboratory results. Perform routine urinalysis according to laboratory protocol. Target audience: medical technology students after they have completed their senior medical technology courses. Course is scheduled at various clinical/hospital sites.

**Style:** 100% Laboratory.

**Grading:** 5% in-class presentation, 95% laboratory evaluation.

**CLSP 4704 Applied Transfusion Medicine**

- **S-N only, 2 credit(s);**
- **Instructor:** Brennecke, Patricia Johnson
- **Description:** Student may contact the instructor or department for information.

**Clinical Physiology and Movement Science**

**CPMS 5101 Introduction to Clinical Physiology and Movement Science**

- **A-F only, 3 credit(s), max credits 6;**
- **Instructor:** Konczak, PhD, Juergen
- **Description:** This course gives students an overview into the fields of clinical physiology and clinical movement science. It provides a basic understanding of clinical issues related to human motor function and the physiological parameters of human performance. It presents the newest research methods to study human movement and physiological function and explains how these methods produce clinically relevant research findings. The course is designed to contrast normal development of human function throughout the lifespan and outlines relevant clinical issues of each life phase, such as child health obesity or rehabilitation after stroke. This interdisciplinary course is suitable for students and professionals in such diverse fields as bioengineering, kinesiology, mechanical engineering, neuroscience, physical therapy, physiology, psychology, public health, and occupational therapy.

**CPMS 5201 Colloquium in Clinical Physiology and Movement Science**

- **S-N only, 1 credit(s), max credits 4, 4 completions allowed;**
- **Instructor:** Anderson, John Harold
- **Description:** Student may contact the instructor or department for information.

**Cognitive Science**

**CgSc 8410 Perspectives in Learning, Perception, and Cognition**

- **S-N only, 2 credit(s), max credits 24, 12 completions allowed;**
- **Instructor:** Gershenson, Celia Wolk
- **Description:** Course Objectives/Goals: The objectives of the course are to provide exposure to current knowledge in the many-faceted field of cognitive sciences. The weekly presentations are designed to encompass the wide range of research areas that comprise the cognitive sciences. Class Structure: The course is in the form of a colloquium series. Each session consists of a 40-50 minute presentation followed by a question and discussion period. Course Requirements: Enrolled students are required to attend all colloquia, read references provided, (the references of which available online at http://www.cogsci.umn.edu/calendar/colloquia.htm), and actively participate in discussion sessions. Students will submit a five to six page paper at the end of the semester in lieu of a final examination.

**College of Food, Agri & Natural Resource Sciences**

**CFAN 1101 Dean's Engaged Leaders Seminar**

- **A-F only, 3 credit(s);**
- **Instructor:** Bellcourt, EdD, Mark A
- **Description:** Student may contact the instructor or department for information.

**CFAN 1201 Discovering Majors and Careers**

- **A-F only, 1 credit(s);**
- **Instructor:** Hruska, Elizabeth Suzanne
- **Description:** Description: Are you anxious or stressed about picking a major or finding a career you'll enjoy? Would you like to actively investigate your major and career options in more detail and explore how they relate to you? Discovering Majors and Careers Course guides you in learning more about your unique strengths, values, interests, skills, and personality. Then we explore how your unique
characteristics relate to the world of majors at the U, and how you can use your major to find a career you'll enjoy. We'll also help you to
discover how internships, community service, work experience, travel and networking (both in-person and social media) can
positively impact your future success. The goal of the class is to help you be proactive about the future and learn strategies that will help with a lifetime of decision making.

*Style: 30% Lecture, 5% Film/Video, 30% Discussion, 30% Small Group Activities, 5% Guest Speakers.*

**CFAN 1902 Topics: Freshman Seminar: Ways of Knowing and Science**

* A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
  *Instructor:* Lorenz, Karl W
  *Description:* Every human society has developed its own knowledge of food and health relationships. But until very recently, scientific researchers at large Universities have paid little attention to this knowledge, in part because it has been dismissed as "unscientific". Most professional scientists do not accept indigenous, ancestral or ancient knowledge systems as valid. When such knowledge is considered, it is studied through the lens of "science" to determine its legitimacy. Diverse food practices and understandings may be acknowledged as cultural artifacts, but are seldom seen by scientists as legitimate on their own merit. In this seminar, we will attempt to take a more culturally competent "inside look" at diverse ways of knowing. Experience is often the best teacher. By direct experience and involvement with another culture, we come to recognize their cultural worldview and its way of seeing and making sense of the world. In this way, you will encounter different ways of knowing. We will focus specifically on different cultural orientations to understanding food and health relationships. We will explore Indigenous knowledges, Ayurveda, Chinese Medicine, western/biomedical and African American perspectives. Each of these "ways of knowing" is grounded in distinct and divergent ancestral and cultural orientations. We will experience and explore these systems through field trips and invited speakers. Accordingly, class time will be re-formed into field trips and on-site learning experiences. All students are expected to attend these field trips or to make other arrangements mutually agreeable with the faculty. Field trip learning experiences will form the basis for assignments. Over the semester, you will be asked to complete: two writing assignments where you will write on a health-related issue of your choice, but from within the perspective being studied; one report based on an individual "practicum" experience (clinic visit, concert, etc) in one of the orientations being explored; one group presentation of 15-20 minutes involving 3-4 students addressing an issue identified by a community as important. This issue will be identified within the first few weeks of class, and groups will work on research/preparation of the presentation so that they can present later in the semester.

**CFAN 1903 Topics: Freshman Seminar: Food Ethics**

* A-F only, 3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Civic Life and Ethics
  *Instructor:* Levine, Allen Stuart
  *Description:* While bio- and medical ethics are often discussed in classroom settings, students interested in food systems (whether local or global) typically have little opportunity to critically evaluate ethical issues associated with how food is produced. Supported by readings from classical and contemporary sources on the ethics of food production, this seminar will expose students to a wide variety of related topics and controversies. A short introduction to ethical theories will provide the tools necessary to host in-depth conversations on key themes regarding how our food is produced and the consequences incurred. Justice: What's the Right Thing to Do? by Michael Sandel will serve as the primary "textbook." Additional readings and short films/videos will be used to highlight discussion topics. Guest speakers will help us better understand various perspectives framing our explorations. Topics the class will engage include: genetically modified foods, organic vs. conventional agriculture, culturally sensitive foods (e.g., wild rice), immigrant labor, vegetarian versus animal-based diets, water and world peace, antibiotic use in food animals, obesity, treatment of food animals, ownership of germplasm, and effects of production agriculture on the environment and urban production of food. The seminar will include student debates on these subjects and point counter point papers.

**CFAN 3000 Directed Studies in International Agriculture**

* A-F only, 2-4 credit(s), max credits 8, 3 completions allowed;
  *Instructor:* STAFF
  *Description:* Student may contact the instructor or department for information.

**CFAN 3201 Career and Internship Preparation**

* A-F only, 1 credit(s);
  *Instructor:* Rechtzigel, Dana Lee
  *Description:* Want to be sure your ready to put your best foot forward when searching for jobs and internships? This 1 credit course is ideal for students in any major seeking internships and/or full time work. This course covers topics that will prepare you for your job/internship search including communicating your skills and strengths, resume writing, interviewing, networking, job searching, setting future career goals, and salary negotiation.
  *Style: 25% Lecture, 5% Film/Video, 15% Discussion, 30% Small Group Activities, 15% Guest Speakers.*
  *Grading: 15% final exam, 15% written homework, 5% attendance, 20% reflection paper, 5% class participation. Career meeting with instructor 5%; Strengths, skills and values assessment 10%; Portfolio 10%; in-class assignment and mock interview participation 15%*
  *Exam Format: N/A*
CFAN 3201 Career and Internship Preparation
A-F only, 1 credit(s);
Instructor: Okstad,Brian Clay
Description: This class is ideal for undergraduate students who are confident they're in the right major and want to begin seeking jobs and internships related to their career goals. Career and Internship Preparation will walk you through the internship or job search process step by step to help you feel more confident in your ability to secure positions in your industry area. Through in-class presentations and activities, you will identify your top skills/strengths and learn how to market these qualities through cover letters, resumes, portfolios and job interviews. Additionally, you will learn the best resources and strategies for finding job openings in your field. Students will also have several opportunities to get advice and insight from industry professionals. Note: If you are still uncertain about your career plans or questioning your major, CFAN 1201, Discovering Majors and Careers, may be a more appropriate course.
Style: You can expect a combination of interactive lectures, small-group workshops, individual activities, and guest speakers.
Grading: 22% reports/papers, 54% special projects, 13% attendance, 11% reflection paper. There will be no exams. The projects and two brief papers are designed to highlight your skills and to help you learn about careers and job-seeking in your field.

CFAN 3201 Career and Internship Preparation
A-F only, 1 credit(s);
Instructor: Hanson,Matthew R
Description: This class is ideal for undergraduate students who are confident they're in the right major and want to begin seeking jobs and internships related to their career goals. Career and Internship Preparation will walk you through the internship or job search process step by step to help you feel more confident in your ability to secure positions in your industry area. Through in-class presentations and activities, you will identify your top skills/strengths and learn how to market these qualities through cover letters, resumes, portfolios and job interviews. Additionally, you will learn the best resources and strategies for finding job openings in your field. Students will also have several opportunities to get advice and insight from industry professionals. Note: If you are still uncertain about your career plans or questioning your major, CFAN 1201, Discovering Majors and Careers, may be a more appropriate course.
Style: 20% Lecture, 30% Discussion, 30% Small Group Activities, 20% Demonstration.
Grading: 25% reports/papers, 50% special projects, 10% class participation, 15% other evaluation. Inventories and Class Activities

CFAN 3201 Career and Internship Preparation
A-F only, 1 credit(s);
Instructor: Hinz,Katy Irene
Description: Student may contact the instructor or department for information.

CFAN 3201 Career and Internship Preparation
A-F only, 1 credit(s);
Instructor: Giefer,Christine M
Description: This course is designed to introduce students to the career development journey. By taking a proactive approach to identifying and achieving their career goals, students will gain confidence in the job-search world and be able to position themselves to succeed. This course will focus on: -Self-assessment -Skills, values and goal setting -Job searching techniques -Resume writing, cover letters, portfolios and other job-search tools -Networking -Interviewing -Professionalism

CFAN 3480 Topics in CFANS: Agroecosystems of the world
3 credit(s), max credits 8;
Instructor: Brakke,Mary Patricia
Description: This class explores four different areas of the world by networking with locals on the ground in each region through online interactions. Our topics of exploration: food, agriculture and the environment. Our big questions: the what's, why's and how's of sustainable food production. In each region, we'll tackle these big questions by looking at the biophysical and socio-cultural aspects of the agroecosystems. Because students will have direct access to people on the ground in each region, they will be able to explore these regions directly through local narratives and intimately explore questions like: how is the relationship to the land reflected in local attitudes toward, and traditions surrounding, food and agricultural production? How do the global concerns of climate change, population pressure, and water scarcity play out intercontinentally in small communities? How are individuals currently coping with global ecological changes? How is the Midwest connected internationally and impacting these communities? By visiting these countries digitally and through the stories of people in-country, students will encounter global and international concerns through a unique multi-disciplinary lens. Previous background in any specific discipline is not required, but students should expect upper division assignments. This is a new course offering in Fall 2012. In the spring and summer of 2012 we will be developing the relationships with our regional collaborators. Currently we are in discussion with individuals in Asia, Africa and Central/South America. Drs. Brakke and Porter, the course instructors, have team-taught adventure learning courses related to food, agriculture and agroecosystems in Africa and South America the past several years.
Style: 10% Lecture, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 50% Web Based. The class will meet from 8:30 until 10:00 on Fridays. There is an expectation students will be actively involved in online social networking activities.
associated with the course for at least a comparable amount of time each week.

**Grading:** 25% reports/papers, 25% special projects, 10% quizzes, 10% in-class presentation, 10% class participation, 20% other evaluation. Online activities will occur and be graded as reflected in the percentages above.

**CFAN 3480 Topics in CFANS: Grad & Prof School: Success Strategies Prep**
1 credit(s), max credits 8;
Instructor: Whyte, Patricia Jones
Description: Student may contact the instructor or department for information.

**CFAN 4801H Honors Thesis**
A-F only, 3 credit(s);
Instructor: King, Robert P
Description: Student may contact the instructor or department for information.

**CFAN 5201 Career and Job Search Preparation for Graduate Students**
S-N only, 1 credit(s);
Instructor: Kubak, Maggie
Description: Job search preparation and career development tools for all graduate students. Focus on non-academic careers though some class content can be targeted to academic search. Topics: goal setting, networking, job search, resume/CV, interviewing. Offered S/N. Meets 11 times over 15 weeks (plus individual appointments). Assignments include resume/CV, informational interview, career development plan.

**College of Liberal Arts  49 Johnston Hall**

**CLA 1001 CLA First-Year Experience I: Composing Your Worlds**
S-N only, 1 credit(s); CLACredit will not be granted if credit has been received for: CLA 1001H;
Instructor: STAFF
Description: "CLA First Year Experience - Composing Your Worlds" CLA 1001 - CLA First-Year Experience I: Composing to Discover Students make the best educational decisions and have the most powerful learning experiences when they: - connect early - think reflectively - plan carefully. The CLA First-Year Experience is therefore designed to encourage students to make connections with learning opportunities as early as possible in their college career. It is a two-semester course (1 cr. each semester) designed to organize a variety of in-class and out-of-class learning experiences and reflection opportunities that will engage students in carefully charting their own educational path on the basis of their strengths, values, and life goals. In this work, we will encourage and support students in taking full advantage of the many campus resources as they develop, reflect on, and implement their educational plans.
Grading: Based on participation, and satisfactory completion of all work.
Exam Format: No exams

**CLA 1001H Honors CLA First-Year Experience I: Composing Your Worlds**
S-N only, 1 credit(s); CLA, honorsCredit will not be granted if credit has been received for: CLA 1001;
Instructor: Brandt, Carl
Description: Student may contact the instructor or department for information.

**CLA 1005 Introduction to Liberal Arts Learning**
A-F only, 3 credit(s);
Instructor: Williams, Andrew L
Description: CLA 1005 is designed to provide students a space and process to examine their academic and career interests and goals in relationship to their experiences, identities, personalities, strengths, competencies, ethics, and values. As part of this process, class participants will examine how contemporary American students understand their education, what they want from it, and how they negotiate and give meaning to their university experience. A critical part of course work will involve bringing an autobiographical and ethnographic lens to your freshman year experience. Our course goals are intentionally aligned with the University of Minnesota's student learning and development outcome goals which provide the framework for the undergraduate educational experience on the Twin Cities campus. More specifically, the student developmental outcomes which the University hopes students are able to increasingly demonstrate as they approach graduation are independence and interdependence, responsibility and accountability, goal orientation, self-awareness, resilience, appreciation of difference, and tolerance of ambiguity. The University also hopes that at the time of receiving a bachelor's degree students can effectively and creatively communicate their goals, strengths, and values to diverse audiences.
Style: 33% Lecture, 66% Discussion.
CLA 3003 Public History
  A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 3001;
  Instructor: O'Brien, Jean Maria
  Description: Student may contact the instructor or department for information.

College of Science and Engineering 106 Lind Hall

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Sharpe, Benjamin G
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Pagel, Adam Paul
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Rivera, Megan Marie
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Gbolo, Simone Zazama
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Haag, Shawn Raymond
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Gilbert, Scott E
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Koch, Ben
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Takatsuka, Kai N
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Heinonen, Miranda
  Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
  A-F only, 1 credit(s);
  Instructor: Nelson, Luc
  Description: Student may contact the instructor or department for information.
CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Duffy, Amanda Jo
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Gunzburger, Jessica S
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Boche, Laura E
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Cheng, Dorothy Shuien
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Dooley, Anna L
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Moore, Whitney A
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Lingren Clark PhD, Beth Maxine
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Dukart, Kyle J
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Heineman, Colby
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Williams, Candace Kay
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Goepferd, Julie Rae
Description: Student may contact the instructor or department for information.

CSE 1001H First Year Experience
A-F only, 1 credit(s);
Instructor: Jensen, Kathryn Marie
CSE 1001H First Year Experience
A-F only, 1 credit(s);
Instructor: Beloy, Andrea D
Description: Student may contact the instructor or department for information.

CSE 1001H First Year Experience
A-F only, 1 credit(s);
Instructor: Anderegg, Jeanne Sandra
Description: Student may contact the instructor or department for information.

CSE 1101 Environmental Issues and Solutions
4 credit(s); Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Wabner, Kathy A
Description: This course will address the behavior of natural systems, human impact on the environment, how we are trying to meet the challenges of supplying the population with water, energy, food etc. while trying to minimize negative impacts. This class meets two liberal education requirements (Physical Science with Lab Core and Environment Theme). The Physical Science with Lab Core is satisfied through analysis of environmental issues, such as pollution, limited resources, and population growth. The hands-on laboratory component reinforces the lecture and requires hypothesis testing, setting up experiments, making physical, chemical and biological measurements, analyzing and interpreting the data, graphing results, and writing laboratory reports. An emphasis on how sustainable solutions to our environmental problems must not only be based on sound science, but also be consistent with our values and ethics. These topics are used to satisfy the Environmental Theme. Part of being a citizen of our world is understanding how human activities (ranging from daily individual to societal choices) impact the environment and the species (including humans) that depend on environmental resources for survival. Minimizing our impacts also requires an understanding of the drivers of environmental processes. Liberal educations requirements such as CSE 1101 are designed to provide such knowledge to make students engaged public citizens.

Communication Studies

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Behme, Timothy Donald
Description: Comm 1101 Introduction to Public Speaking is designed to increase students' abilities to compose and present non-trivial speeches as well as decrease their anxiety while doing so. The course also increases students' abilities to critique public discourse specifically and insightfully. As such, students create and deliver at least three major graded speeches, receiving both guided instruction and public-speaking practice along the way. Students also critique speeches given by themselves, their peers, and public figures. Students are tested on their knowledge of relevant concepts and theories, yet the majority of the course grade is based upon their performance on assignments related to speech preparation, presentation, and evaluation. Students may contact the instructors listed for particular sections of Comm 1101 for more specific information about those particular sections.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Jurisz, Rebecca Ann
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Porter II, Louis
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Baxter, Michael Judson
Description: Student may contact the instructor or department for information.
Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Kunde, Meg H.
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Short, Eric J
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Bergh, Justin Lars
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Bell, Shelby
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Rapp, Alison G
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Arcy, Jacquelyn H
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Frank, Jay Alexander
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Janati, Jody
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Hansen, Wes
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Cho, Min Kyong
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Branson, Carolina Renee Fernandez
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Hayes, Heather Ashley
Description: Student may contact the instructor or department for information.
Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Weise, Lars
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Wight, Julie
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Anderson, Sky LaRell
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Yerke, Corrina A
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Makstenieks, Scott Thomas
Description: Student may contact the instructor or department for information.

Comm 1101H Honors: Introduction to Public Speaking
A-F only, 3 credit(s); Honors Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Nordin, John P
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Rose, Jeremy H
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Thomas II, Milton E
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Cormany, Diane Laura
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Hoffmann, Melody L
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Nordin, John P
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Hiland, Alexander Scott
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Tucker, David P
Description: Student may contact the instructor or department for information.

Comm 1313W Analysis of Argument
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Calder, Simon Richard
Description: Student may contact the instructor or department for information.

Comm 1905 Freshman Seminar: Communicating the Holocaust
A-F only, 3 credit(s), max credits 6;
Instructor: Gross, Alan G
Description: Schindler's List turns the Holocaust into Hollywood. But the Holocaust was nothing like that. Rather, it was a double tragedy: for the German people and the Jews of Europe. The first descended from the heights of culture to the despicable barbarism of which the second were the victims. In this seminar, in such films as Shoah, and memoirs like Survival in Auschwitz, you will hear these victims speak in their own voices. In such films as The Wannsee Conference and such books as Ordinary Men, you will hear their tormentors speak candidly about their experiences. These riveting accounts are not about unnamed millions, but about the temptations and tragedies of real people, victims and perpetrators who were as Nietzsche says, human, all too human.
Style: 30% Lecture, 20% Film/Video, 50% Discussion.
Grading: 100% reports/papers.

Comm 1908W Freshman Seminar: Great Words of Great U.S. Presidents
A-F only, 3 credit(s), max credits 6; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Campbell, Karlyn Kohrs
Description: Student may contact the instructor or department for information.

Comm 1910W Freshman Seminar: Telling Stories in a Digital Age
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive
Instructor: Sheldon PhD, Amy
Description: We are all storytellers. We learned before we could read or write. We have one foot in the world of an ancient linguistic practice that connects us to all speakers of human languages who have inhabited the earth. Our other foot is in the fast-pace world of the 21st Century. You are the storyteller. You are the techie wannabe, learning to use digital technology to record, annotate, slow down, capture images, transcribe, and analyze your stories. You will record yourself hanging out with a few friends or family members. Inevitably spontaneous stories emerge in conversations, told on the fly in informal moments. We will read about, and then use, concepts and tools of academic discourse analysts to help us understand how words and gestures -- what analysts call ?embodied talk? -- co-create a story and make it a complex multimodal communication event. You will analyze and interpret your story data in some brief reports and a final academic term paper that are informed by your reading. Your work will be enhanced by technology: incorporating visual and verbal elements of the story into your description. No prior tech knowledge necessary. You don?t have to be a geek, an English major, or an accomplished fiction writer. All tech will be provided; assistance will be available.

Comm 3110 Topics in Speech-Communication
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Helwich, David A
Description: Student may contact the instructor or department for information.

Comm 3190H Honors Course: Research Seminar in Communication
A-F only, 3 credit(s), max credits 6;
Instructor: STAFF
Comm 3201 Introduction to Electronic Media Production  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Gregg,Peter Benjamin  
Description: Student may contact the instructor or department for information.

Comm 3201 Introduction to Electronic Media Production  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Cole,Erin Louise Dempsey  
Description: Student may contact the instructor or department for information.

Comm 3201 Introduction to Electronic Media Production  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Hassoun,Daniel Joseph  
Description: Student may contact the instructor or department for information.

Comm 3201 Introduction to Electronic Media Production  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Neuman-Scott,Mark A  
Description: The course goal is to enhance your understanding of television and film as a communications medium, which is unique in its potential to influence the presentation of ideas. You will be responsible for three video production projects. The productions are designed to help you develop a critical attitude toward both producing and consuming visual media content. The video productions are hands-on in a multi-camera studio. In this class you will be expected to learn: 1) The fundamental techniques of in-studio live-on-tape (l-o-t) video production 2) To write and produce as a part of a video production team 3) The communicative aspects of visual and sound aesthetics 4) To write competent critical analyses of visual media  

Comm 3201 Introduction to Electronic Media Production  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Shaffer,Allyson K  
Description: Student may contact the instructor or department for information.

Comm 3204 Advanced Electronic Media Production  
A-F only, 4 credit(s);  
Instructor: Gregg,Peter Benjamin  
Description: This course is designed to provide students with experience in live-on-tape and single camera video production, including post production on video editing workstations, shooting and lighting on locations, and sound recording. The course emphasis is on field production. Students will work in groups on two major projects: the opening pilot of a television show and a client-based public service announcement. Students will apply the aesthetic and critical knowledge they acquired in Comm 3201, and learning further techniques, technologies, and theories. This course requires extensive out-of-class work. Comm 3201 is a required prerequisite.  
Style: 33% Lecture, 33% Discussion, 34% Laboratory.  
Grading: 15% reports/papers, 60% special projects, 10% class participation, 15% laboratory evaluation.

Comm 3204 Advanced Electronic Media Production  
A-F only, 4 credit(s);  
Instructor: Neuman-Scott,Mark A  
Description: This course is designed to provide students with experience in single camera video production, including post production on video editing workstations, shooting and lighting on locations, and sound recording. The course emphasis is on field production. Students will work in groups on two major projects. Students will apply the aesthetic and critical knowledge they acquired in Comm 3201, and learning further techniques, technologies, and theories. This course requires extensive out-of-class work. Comm 3201 is a required prerequisite.  
Style: 33% Lecture, 33% Discussion, 34% Laboratory.  
Grading: 10% reports/papers, 60% special projects, 5% class participation, 25% laboratory evaluation.

Comm 3211 Introduction to U.S. Electronic Media  
3 credit(s);  
Instructor: Vavrus,Mary D  
Description: Student may contact the instructor or department for information.
Comm 3231 Reality TV: History, Culture, and Economics
3 credit(s);
Instructor: Ouellette, Laurie Jean
Description: Student may contact the instructor or department for information.

Comm 3263W Media Literacy: Decoding Media Images and Messages
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Elias, Liora P.
Description: Student may contact the instructor or department for information.

Comm 3263W Media Literacy: Decoding Media Images and Messages
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Schowalter, Dana M
Description: Student may contact the instructor or department for information.

Comm 3263W Media Literacy: Decoding Media Images and Messages
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Page, Allison C
Description: Student may contact the instructor or department for information.

Comm 3263W Media Literacy: Decoding Media Images and Messages
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Zimmerman, Heidi M
Description: Student may contact the instructor or department for information.

Comm 3401 Introduction to Communication Theory
3 credit(s);
Instructor: Isaacs, Alyssa Marie
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. Social scientific theory in communication. Communication history. Logic of scientific/communication theories in interpersonal, small group, organizational, intercultural, and electronically mediated communication.
Style: 100% Web Based.
Grading: 26% special projects, 48% quizzes. -1 self-introduction: 2% -4 discussions: 16% -2 application exercises: 8% -reflection paper: 3% extra credit (optional)

Comm 3402 Introduction to Interpersonal Communication
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 3411 Introduction to Small Group Communication
3 credit(s);
Instructor: Larsen, Nan Gesche
Description: In a growing world, our ability to "play well with others" is a life skill that will be valuable in the job market and your personal interactions. Thus small group communication skills are critical to everyone to make groups and group members more effective. Not only do you obtain a greater knowledge of group dynamics, you also learn more about them in group settings. In this course we will examine case studies, learn different methods of group decision making, analyze the different stages of group development, manage group conflicts, and understand how leadership advances effect group problems. Topics such as virtual and nonverbal communication are also covered and discussed. You will learn these concepts using multiple tools such as lectures, readings, and small group assignments in class. The small group interaction provides a hands on approach for you to practice the things you learn in class.

Comm 3411 Introduction to Small Group Communication
3 credit(s);
Instructor: Grayden, Elizabeth D
Description: Student may contact the instructor or department for information.
Comm 3411 Introduction to Small Group Communication
3 credit(s);
Instructor: Shada, Andrea
Description: In a growing world, our ability to "play well with others" is a life skill that will be valuable in the job market and your personal interactions. Thus small group communication skills are critical to everyone to make groups and group members more effective. Not only do you obtain a greater knowledge of group dynamics, you also learn more about them in group settings. In this course we will examine case studies, learn different methods of group decision making, analyze the different stages of group development, manage group conflicts, and understand how leadership advances effect group problems. Topics such as virtual and nonverbal communication are also covered and discussed. You will learn these concepts using multiple tools such as lectures, readings, and small group assignments in class. The small group interaction provides a hands on approach for you to practice the things you learn in class.

Comm 3411 Introduction to Small Group Communication
3 credit(s);
Instructor: Zhu, Min
Description: In a growing world, our ability to "play well with others" is a life skill that will be valuable in the job market and your personal interactions. Thus small group communication skills are critical to everyone to make groups and group members more effective. Not only do you obtain a greater knowledge of group dynamics, you also learn more about them in group settings. In this course we will examine case studies, learn different methods of group decision making, analyze the different stages of group development, manage group conflicts, and understand how leadership advances effect group problems. Topics such as virtual and nonverbal communication are also covered and discussed. You will learn these concepts using multiple tools such as lectures, readings, and small group assignments in class. The small group interaction provides a hands on approach for you to practice the things you learn in class.

Comm 3422 Interviewing and Communication
A-F only, 3 credit(s);
Instructor: Odash, Diane L
Description: Student may contact the instructor or department for information.

Comm 3431 Persuasion Theories
3 credit(s);
Instructor: STAFF
Description: This course is designed to familiarize you with the complex and dynamic phenomenon of persuasion as a form of human communication. There are three basic objectives for the course: 1) To be able to understand the concept of persuasion from a theoretical perspective, and be familiar with the research findings on the persuasion process. 2) To demonstrate understanding of the process of persuasion in a variety of communication contexts, through oral and written exercises. 3) To be a critical consumer of persuasive messages.
Style: 80% Lecture, 20% Discussion.
Grading: 12% mid exam, 12% final exam, 25% reports/papers, 12% special projects, 25% quizzes, 12% class participation.
Exam Format: Mixture of multiple choice and short answer/definition questions

Comm 3451W Intercultural Communication: Theory and Practice
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Albert, Rosita D
Description: Student may contact the instructor or department for information.

Comm 3452W Communication and the Intercultural Reentry
3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 3601 Introduction to Rhetorical Theory
3 credit(s);
Instructor: Kunde, Meg H.
Comm 3605W Persuasive Speaking and Speech Writing
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Prasch, Allison
Description: Student may contact the instructor or department for information.

Comm 3625 Communication Ethics
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 3631 Freedom of Speech
3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 3645W How Pictures Persuade
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Hill, Annie
Description: Visual rhetoric is a form of argumentation. Daily we encounter visual rhetoric that attempts to persuade us to think about this problem, to purchase that product, to travel to this destination, and to accept that truth. In 3645W, we explore how pictures persuade by examining commercials, fashion editorials, political cartoons and campaign posters, graphic novels, and war photography. As a student in this course, you will analyze visual arguments through workshops and discussions. You will select examples of visual rhetoric to interpret, first in class and then in formal essays. And you will have the opportunity to create persuasive pictures of your own. By studying visual rhetoric, you will join a very exciting field of study and advance yourself as a writer, researcher, and rhetor. Remember: 3645W is writing intensive! Although the course focuses on visually based arguments, all students are required to read many books and articles and to show a significant commitment to developing their writing skills throughout the semester.

Comm 3682W Communicating War
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Gross, Alan G
Description: Peace, the ancient Greek historian, Thucydides truly said, is a hiatus in a war that never really ends. The American case exemplifies this maxim: the Revolutionary War, the War of 1812, the Mexican War the Civil War, the Indian Wars, the Spanish-American War, World War One, World War Two, Korea, Vietnam, Panama, Granada, the Gulf War, the Afghan War, the Iraq War. Only the dead, Plato said, have seen the end of war. In this course, we will study four books: E. B. Sledge's compelling memoir of his experience as a combat marine in World War Two, With the Old Breed; Xenophon's hair-raising personal account of his fighting retreat with an army of 10,000 Greek mercenaries across a thousand miles of hostile territory, Anabasis; John Nagl's insightful analysis of counter-insurgency, Learning to Eat Soup with a Knife, required reading at the White House and in the Pentagon; and, finally, Michael Walzer's profound study of the ethics of warfare, Just and Unjust Wars. In these works, we will examine how nations communicate with themselves and with others concerning the meaning of war. We will investigate how nations and individual soldiers justify their participation and their conduct in their wars. We will look at these issues from the perspective of the individual soldier and the commander; we will also look at these issues from the point of view of the nation. On this topic, we will look specifically at two contentious matters. One concerns the best way to conduct campaigns of counter-insurgency, the most pressing problem in contemporary warfare; the other concerns the best way for nations to wage war in manner least likely to cast shame or dishonor upon their citizens. Students will have an opportunity to grapple with these issues in discussion and to reflect on their implications. Reflection will also be promoted because this course is Writing Intensive. Four short essays will give the students an opportunity to reflect on issues brought up by each of the books that are read.
Style: 40% Lecture, 20% Film/Video, 40% Discussion.
Grading: 100% reports/papers.

Comm 3990 Research Practicum
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Jones, Susanne Margarethe
Description:
Grading: Students will be graded for the extent to which they have fulfilled project assignments to the principal investigator's satisfaction

Comm 4204 Producing for Television: Theory and Practice
4 credit(s);
Instructor: Neuman-Scott, Mark A
Description: Television is arguably the most influential form of mass media both as entertainment and information. The producer's choices in content and production aesthetics shape the message of this critical medium. Producing For Television will present the production process as a series of steps that transform media content based on audience, thematic design and story concept. Students will consider the aesthetic decisions necessary in developing a television program. They will write a script, complete preproduction planning and consider their crew and talent needs for their television program, along with exploring their social responsibilities as a media producer. Students are expected to have an understanding of cinematic grammar, the aesthetic elements of video production and how they shape media content, and knowledge of video and editing equipment. This class will also create an opportunity for students to present their production design and scripts to a group for critique and feedback as they work through the preproduction process and script development in preparation to the shoot and edit their television program. COMM 3201 and 3204 are prerequisites

Comm 4221 Communication and Popular Music
3 credit(s);
Instructor: Pedelty, Mark Holmes
Description: Communication and Popular Music examines the social production, distribution, and consumption of popular music. What are the cultural, political, and even ecological meanings of popular music? How have musical genres formed and functioned historically? Does the music industry empower or restrict musical creativity? In order to answer these and other musical questions, students will read the work of influential authors in popular music studies, while conducting ethnographic field research in a musical community of their own choosing (e.g., rehearsal hall, waiting room, music studio, etc.). Communication and Popular Music is a collaborative learning experience, meaning that student discovery, effort, and input will play an essential role in the course.
Style: 15% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 30% Student Presentation, 5% Guest Speakers, 10% Web Based.
Grading: 10% final exam, 20% reports/papers, 20% special projects, 30% quizzes, 20% in-class presentation.

Comm 4235 Electronic Media and Ethnic Minorities--A World View
3 credit(s);
Instructor: Squires, Catherine R
Description: Student may contact the instructor or department for information.

Comm 4245 Critical Television Studies
3 credit(s);
Instructor: Ouellette, Laurie Jean
Description: Student may contact the instructor or department for information.

Comm 4407 Communication and Conflict
A-F only, 3 credit(s);
Instructor: Hewes, Dean E
Description: Student may contact the instructor or department for information.

Comm 4471 Communication in Marriage and Family
3 credit(s);
Instructor: Koerner, Ascan Felix
Description: Student may contact the instructor or department for information.

Comm 4621W Rhetoric of Feminism
3 credit(s); Credit will not be granted if credit has been received for: GWSS 4621W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Hill, Annie
Description: Student may contact the instructor or department for information.

Comm 5211 Critical Media Studies: Theory and Methods
A-F only, 3 credit(s);
Instructor: Squires, Catherine R
Description: Student may contact the instructor or department for information.

Comm 5221 Media, Race, and Identity
3 credit(s);
**Instructor:** Rodman, Gilbert B.

**Comm 5231 Media Outlaws**
3 credit(s);
Instructor: Rodman, Gilbert B.
Description: Student may contact the instructor or department for information.

**Comm 5441 Communication in Human Organizations**
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

**Comm 5441 Communication in Human Organizations**
3 credit(s);
Instructor: Jacobi, Laura Jean
Description: This fully online section is offered though Online and Distance Learning (ODL), College of the Continuing Education. It may be taken for either undergraduate or graduate credit. (Graduate students are advised to register for A–F grading.) Visit "Class URL" for ODL policies, including fee and financial aid information. This course helps students understand the distinct nature of human communication in organizations. Students will learn to recognize the key factors that influence individuals and apply theories of organizational communication. After identifying and using established methods to diagnose issues and problems related to communication, students will develop their own strategies for discovering and explaining organizational and individual interactions.

**Style:** 100% Web Based.

**Grading:** --12 weekly online discussion submissions and responses (33.3% undergrad, 28.6% grad) --2 brief reviews (33.3% undergrad, 28.6% grad) --1 research project (33.4% undergrad, 28.6% grad) --1 profile of a communications scholar (14.2% grad only)

**Comm 5451W Intercultural Communication Processes**
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Jacobi, Laura Jean
Description: Student may contact the instructor or department for information.

**Comm 8210 Seminar: Selected Topics in U.S. Electronic Media**
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Pedelty, Mark Holmes
Description: From classic newsroom studies to online "virtual ethnographies," ethnography has taken on an important role in media studies. This seminar emphasizes a media anthropology approach to fieldwork, with comparative readings from cultural studies. The seminar will help students learn basic fieldwork methods, how to read ethnographic texts, as well as how to write ethnographically. Because a central goal of ethnographic research is to gain an intersubjective understanding of cultural processes, basic cultural theories will be introduced as well. The best way to learn ethnographic methods is through fieldwork. Therefore, each student will conduct an ethnographic research project in the local area or via immersive online research. Participant-observation fieldwork will provide an introduction to ethnographic methodology, material for class discussions, and data for the research paper. Students will be encouraged to conduct field research on topics related to their theses or dissertations, whenever possible.

**Style:** 5% Lecture, 5% Film/Video, 60% Discussion, 10% Small Group Activities, 15% Student Presentation, 5% Guest Speakers.

**Grading:** 50% reports/papers, 30% reflection paper, 10% in-class presentation, 10% class participation. Each student will facilitate one reading as well

**Comm 8452 Seminar: Methods of Intercultural/Diversity Facilitation**
3 credit(s);
Instructor: Albert, Rosita D
Description: The seminar will focus on various approaches/methods of improving intercultural relations, whether domestically, or internationally. We will consider major methods for intercultural sensitzation and training, read academic articles and chapters by the leading figures in the field of intercultural relations and training (most of whom I know personally), consider intercultural training in different settings, examine the effectiveness of various approaches, read research on effectiveness, address practical issues and challenges in designing and carrying out such sensitization, try versions of various methods and so on. Graduate students from various departments and with a variety of interests in intercultural and diversity sensitization are warmly welcome. While previous courses in intercultural communication are helpful, they are not required. Participants will have an opportunity to develop a project related to the topic that focuses on their interest. Each participant will receive comments and suggestions from the instructor and from other participants in developing their project, and in turn, will contribute ideas and suggestions to help other participants in their projects. Projects can focus on designing a program, developing a research project, or can have another focus that is approved by the instructor.
Participants will also help summarize, analyze and discuss the academic literature in this area. As the instructor I will serve as a resource person, and will share my long experience in teaching, training, research (both in intercultural relations and training), and consulting with cultural diversity both domestically and internationally. I am a Founding Fellow and current member of the Board of Directors of the interdisciplinary International Academy for Intercultural Research, the premier organization in the field of intercultural relations and training. The program in the Department of Communication has been a pioneer in the field of intercultural communication not only nationally, but internationally. MA students who take 6 credits and Ph.D. students who take 9 credits can have a Minor in Intercultural Communication. As a member of the graduate faculty in the department, I serve on MA. and Ph.D. committees of students with intercultural/diversity interests.

Comm 8504 Seminar: Rhetorical Criticism
3 credit(s);
Instructor: Campbell,Karlyn Kohrs
Description: Student may contact the instructor or department for information.

Comparative Literature 235 Nicholson Hall

CL 8001 Basic Seminar in Comparative Literature I
3 credit(s);
Instructor: Mowitt,John W
Description: Student may contact the instructor or department for information.

CL 8910 Advanced Topics in Comparative Literature: Spinoza and the 20th Century
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Casarino,Cesare
Description: A detailed examination of the thought of Karl Marx, focusing entirely on his major works (i.e., selections from Grundrisse, and from Capital, Volumes One and Three). Secondary literature will include works by Althusser, Balibar, Negri, and others.
Style: 40% Lecture, 40% Discussion, 20% Student Presentation.
Grading: 80% reports/papers, 20% in-class presentation.

CL 8910 Advanced Topics in Comparative Literature: Heidegger
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Pepper,Thomas Adam
Description: Student may contact the instructor or department for information.

CL 8910 Advanced Topics in Comparative Literature: Sociologies of Music
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Gopinath,Sumanth S
Description: Student may contact the instructor or department for information.

Comparative Studies in Discourse and Society 235 Nicholson Hall

CSDS 8001 Basic Seminar: Comparative Studies in Discourse and Society I
3 credit(s);
Instructor: Mowitt,John W
Description: Student may contact the instructor or department for information.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Spinoza and the 20th Century
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Casarino,Cesare
Description: A detailed examination of the thought of Karl Marx, focusing entirely on his major works (i.e., selections from Grundrisse, and from Capital, Volumes One and Three). Secondary literature will include works by Althusser, Balibar, Negri, and others.
Style: 40% Lecture, 40% Discussion, 20% Student Presentation.
Grading: 80% reports/papers, 20% in-class presentation.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Heidegger
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Pepper,Thomas Adam
Description: Student may contact the instructor or department for information.
CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Sociologies of Music
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Gopinath, Sumanth S
Description: Student may contact the instructor or department for information.

CSDS 8993 Directed Study in Comparative Studies in Discourse and Society
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Mowitt, John W
Description: Student may contact the instructor or department for information.

CSDS 8993 Directed Study in Comparative Studies in Discourse and Society
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Lovejoy, Alice Osborne
Description: Student may contact the instructor or department for information.

Comparative and Molecular Biosciences

CMB 5200 Statistical Genetics and Genomics
A-F only, 4 credit(s);
Instructor: Da, Yang
Description: This course is the first course of a 2-course series on gene discovery and genomic selection using genome-wide SNP markers. The focus of this course is data analysis for gene discovery based on the relationships between phenotypes and DNA markers. This course has six components: 1) preparation in statistics, genomics concepts and population genetics; 2) parametric linkage analysis; 3) nonparametric linkage analysis including linkage disequilibrium analysis; 4) analysis for mapping quantitative trait loci (QTL); 5) analysis of genome-wide association studies; and 6) parentage testing and concepts of genomic prediction and selection.

CMB 5594 Directed Research in Comparative and Molecular Biosciences
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

CMB 5910 Grantwriting: What Makes a Winning Proposal?
S-N only, 1 credit(s); Credit will not be granted if credit has been received for: VMED 5910;
Instructor: Rutherford, Mark Stephen
Description: Student may contact the instructor or department for information.

CMB 8100 Research Rotation in Comparative and Molecular Biosciences
S-N only, 1 credit(s), max credits 2;
Instructor: Murtaugh, Michael P
Description: Student may contact the instructor or department for information.

CMB 8134 Ethical Conduct of Animal Research
A-F only, 3 credit(s); [Grad or professional school] student or instr consent Credit will not be granted if credit has been received for: ANSC 8134;
Instructor: Crooker, Brian A
Description: The major objectives for this course are designed to meet federal requirements for training in ethical scientific conduct, particularly as it pertains to use of animal subjects. This course provides 1) a framework for understanding the ethical pros and cons for the use of nonhuman animals in research; 2) information about resources and regulations regarding the care and use of nonhuman animals; 3) theoretical bases and practical experiences with regard to the purpose and function of regulatory and oversight bodies; and 4) awareness of issues related to biomedical, clinical, and agricultural research.

CMB 8202 Mechanisms of Animal Health and Disease II
3 credit(s);
Instructor: Reed, Kent
Description: Student may contact the instructor or department for information.
CMB 8208 Neuropsychopharmacology
A-F only, 3 credit(s); graduate student and instr consent Credit will not be granted if credit has been received for: PSY 8061;
Instructor: Molitor, Thomas William
Description: Student may contact the instructor or department for information.

CMB 8394 Research in Comparative Biomedical Sciences
1-6 credit(s), max credits 18, 5 completions allowed;
Instructor: Murtaugh, Michael P
Description: Student may contact the instructor or department for information.

CMB 8481 Advanced Neuropharmaceutics
A-F only, 4 credit(s); instr consent Credit will not be granted if credit has been received for: NSC 8481;
Instructor: Fairbanks, Carolyn Ann
Description: Student may contact the instructor or department for information.

CMB 8550 Comparative and Molecular Biosciences Seminar
S-N only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: Rutherford, Mark Stephen
Description: This is a seminar course in which students will be exposed to graduate student research activities via the oral presentation of scientific data. Students will prepare and present one 25 minute seminar of their work. It is expected to enhance the student's public speaking skills and to provide experience in the preparation of visuals for scientific presentations. Formal review of presentation effectiveness is provided by the instructor and other students in the class.

Computer Science

CSci 1103 Introduction to Computer Programming in Java
4 credit(s);
Instructor: Parker, James Edward
Description: Student may contact the instructor or department for information.

CSci 1113 Introduction to C/C++ Programming for Scientists and Engineers
4 credit(s);
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 1901 Structure of Computer Programming I
4 credit(s);
Instructor: Dovolis, Chris John
Description: CSci 1901 is the first required course for Computer Science majors. CSci 1901 is a prerequisite for CSci 1902 and many other CSci courses. Therefore, students planning to major in computer science and non-majors who plan to take other more advanced computer science courses should take CSci 1901 first. CSci 1901 is a challenging course that covers many fundamental programming and software design principles in a practical manner. The following topics are covered: data abstraction, data representations, procedural abstraction, recursion, iteration, lists, tables, intro to object oriented programming and intelligent data. The Scheme programming language is used to implement programs using these concepts. The text for the course is Abelson and Sussman's "Structure and Interpretation of Computer Programs." CSci 1901 is very time consuming, and the pace is quick. Be sure to allot plenty of time for this course. There is a very large programming component to this course. Students may work in pairs on programming assignments.
Style: 70% Lecture, 30% Discussion.
Grading: 30% mid exam, 30% final exam, 40% other evaluation. Programming assignments
Exam Format: Programming

CSci 1901H Honors Structure of Computer Programming
A-F only, 4 credit(s);
Instructor: Gini, Maria L
Description: Student may contact the instructor or department for information.

CSci 1902 Structure of Computer Programming II
4 credit(s);
CSci 2011 Discrete Structures of Computer Science
4 credit(s);
Instructor: Sturtivant, Carl
Description: Student may contact the instructor or department for information.

CSci 2021 Machine Architecture and Organization
4 credit(s);
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 2033 Elementary Computational Linear Algebra
4 credit(s);
Instructor: Saad, Yousef
Description: Matrices and linear transformations, basic theory. Linear vector spaces. Inner product spaces. Systems of linear equations, Eigenvalues, and singular values. Algorithms and computational matrix methods using MATLAB. Use of matrix methods to solve a variety of computer science problems.
Style: 70% Lecture, 30% Discussion.
Grading: 30% mid exam, 30% final exam, 40% written homework.
Exam Format: written exam. problem solving.

CSci 3081W Program Design and Development
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Larson, Amy Caroline
Description: Student may contact the instructor or department for information.

CSci 3921W Social, Legal, and Ethical Issues in Computing
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Barry, Phillip
Description: Computing technology is having profound effects on society, providing many benefits in communication, commerce, science, and medicine. Our increasing reliance on computers has created many challenges, however. The Internet generates concerns about privacy, freedom of speech, and intellectual property rights. We have also seen how the World Wide Web can make us vulnerable to attacks through worms and viruses. This course will consider these topics within a framework of computer ethics.
Style: 60% Lecture, 20% Discussion. in class exercises
Grading: 15% mid exam, 50% reports/papers, 15% special projects, 5% quizzes, 10% class participation, 5% problem solving.
Exam Format: short answer

CSci 3970 Industrial Student Co-op Assignment
S-N only, 2 credit(s), max credits 4;
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 4011 Formal Languages and Automata Theory
4 credit(s);
Instructor: Nadathur, Gopalan
Description: Student may contact the instructor or department for information.

CSci 4041 Algorithms and Data Structures
4 credit(s);
Instructor: Sturtivant, Carl
Description: Algorithms & Data structures, their implementation, and the analysis of their performance are the subjects of this class. We will examine many well known algorithms that solve important problems efficiently, and also learn something of the art of algorithm design, especially through the paradigms of "divide and conquer", "dynamic programming", and "greedy methods", as well as through adapting existing algorithms and data structures to the task at hand. Performance analysis will be a central feature of the class, both for well known algorithms, and for ones we have newly designed as exercises. Subject areas we cover will include sorting & searching, priority queues, hash tables, binary search trees, disjoint set forests, elementary graph algorithms, minimum spanning trees, single-
source shortest paths, all-pairs shortest paths and Huffman coding.

Style: 70% Lecture. Recitation
Grading: 10% mid exam, 35% final exam, 40% problem solving, 15% other evaluation. Programming assignments
Exam Format: Problem-solving

CSci 4061 Introduction to Operating Systems
4 credit(s);
Instructor: STAFF
Description:

CSci 4131 Internet Programming
3 credit(s); 4061, 4211 recommended, cannot be taken for grad CSci crCredit will not be granted if credit has been received for: CSCI 5131;
Instructor: Sturtivant, Carl
Description: JavaScript enhancement of HTML documents; CGI programming in Perl using CGI.pm; Java servlet programming as an alternative to CGI programming in Perl; CGI programming in Perl with database servers via DBI.pm; Socket programming in both Perl and Java: clients, servers and protocols; Perl programming with ftp, telnet, ssh, mail protocols, etcetera.
Style: 100% Lecture.
Grading: 10% mid exam, 35% final exam, 55% other evaluation. Programming assignments
Exam Format: Essay

CSci 4203 Computer Architecture
4 credit(s); 2021 or instr consent credit will not be granted if credit received for: 5201, EE 5361Credit will not be granted if credit has been received for: EE 4363;
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

CSci 4211 Introduction to Computer Networks
3 credit(s); 4061 or instr consent ; basic knowledge of [computer architecture, operating systems] recommended, cannot be taken for grad CSci crCredit will not be granted if credit has been received for: CSCI 5211;
Instructor: Du, David Hung-Chang
Description: Student may contact the instructor or department for information.

CSci 4707 Practice of Database Systems
3 credit(s); 4041 or instr consent Credit will not be granted if credit has been received for: CSCI 5707;
Instructor: Mokbel, Mohamed F
Description: Student may contact the instructor or department for information.

CSci 4921 History of Computing
3 credit(s); Credit will not be granted if credit has been received for: HSCI 4321; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Misa, Thomas J
Description: Course examines the question "how do technologies change the world?" through the history of computing. Readings, discussions, and lectures on the people, technologies, ideas, and institutions of modern computing; and the uses of computers in computation, control, simulation, communication, and recreation. Developments in last 150 years: evolution of hardware and software; growth of computer and semiconductor industries and their relations to other businesses; changing relationships resulting from new data-gathering and analysis techniques; automation; social and ethical issues

CSci 4950 Senior Software Project
A-F only, 3 credit(s), max credits 6;
Instructor: Chandra, Abhishek
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.
CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Collins, John
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Karypis, George
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Hopper, Nicholas J
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Zhang, Zhi-Li
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Barry, Phillip
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Konstan, Joseph Andrew
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Boley, Daniel L
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Papanikolopoulos, Nikolaos P
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Riedl, John T
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Janardan, Ravi
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Saad, Yousef
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Sturtivant, Carl
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Kumar, Vipin
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Tripathi, Anand R
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Du, David Hung-Chang
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Heimdahl, Mats
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Shekhar, Shashi
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Gini, Maria L
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Schrater, Paul Robert
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Srivastava, Jaideep
Description: Student may contact the instructor or department for information.
CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Interrante, Victoria
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Kuang, Rui
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Weissman, Jon B
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: He, Tian
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Nadathur, Gopalan
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Meyer, Gary W
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Van Wyk, Eric
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Terveen, Loren Gilbert
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Roumeliotis, Stergios
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Kim, Yongdae
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Chandra, Abhishek
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Zhai, Antonia Bingheng
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Mokbel, Mohamed F
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Banerjee, Arindam
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Myers, Chad Leighton
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Keefe, Daniel F
Description: Student may contact the instructor or department for information.

CSci 4970W Advanced Project Laboratory
3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Isiler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 5103 Operating Systems
3 credit(s);
Instructor: Tripathi, Anand R
Description: Student may contact the instructor or department for information.

CSci 5106 Programming Languages
3 credit(s);
Instructor: Van Wyk, Eric
Description: This course covers the design and implementation of high-level programming languages. The course has two parts: (1) language design principles, concepts, constructs; (2) language paradigms, including logic, functional, object-oriented and concurrent programming languages and their applications. Note that we will learn different programming languages only to examine their features and relationship to other languages and not to become proficient in any specific language. The details given below are a preliminary estimation and may change as I develop the course. The course will be web enhanced but the URL is not yet available.
Style: 90% Lecture, 10% Discussion.
Grading: 30% mid exam, 35% final exam, 20% special projects, 15% problem solving.
Exam Format: short answer questions and problems

CSci 5107 Fundamentals of Computer Graphics 1
3 credit(s); [4041 or instr consent ], fluency in C/C++, mastery of basic concepts in linear algebra Credit will not be granted if credit has been received for: CSCI 4107;
Instructor: Interrante, Victoria
Description: Student may contact the instructor or department for information.

CSci 5115 User Interface Design, Implementation and Evaluation
3 credit(s);
Instructor: Terveen, Loren Gilbert
Description: This class covers the theory, design, evaluation, and implementation of interactive application interfaces. The course is built around a large design, evaluation, and implementation project that is completed in groups. Topics include: human capabilities and limitations, the interface design and engineering process, prototyping, issues in interface construction, interface evaluation, and current topics such as data visualization, world wide web interfaces, online communities, and ubiquitous computing. The class format is lecture, in-class individual and group activities, and discussion. Class participation is expected. Thoughtful questions are as important as...
CSci 5204 Advanced Computer Architecture
3 credit(s);
Instructor: Karpuzcu,Rahmet Ulya
Description: Student may contact the instructor or department for information.

CSci 5211 Data Communications and Computer Networks
3 credit(s); [4061 or instr consent], basic knowledge of [computer architecture, operating systems, probability], grad student
Credit will not be granted if credit has been received for: CSCI 4211;
Instructor: Du,David Hung-Chang
Description: Student may contact the instructor or department for information.

CSci 5271 Introduction to Computer Security
3 credit(s);
Instructor: Hopper,Nicholas J
Description: This course will introduce students to many of the basic concepts of computer, network and information security. Topics covered will include risk analysis, authentication, access control, security evaluation, audit trails, cryptography, network security, database security, application security, viruses and firewalls. The target audience is first-year graduate students and senior undergraduates in computer science and engineering.
Style: 90% Lecture, 10% Discussion.
Grading: 25% mid exam, 25% final exam, 25% special projects, 25% problem solving.

CSci 5304 Computational Aspects of Matrix Theory
3 credit(s);
Instructor: Saad,Yousef
Description: Student may contact the instructor or department for information.

CSci 5421 Advanced Algorithms and Data Structures
3 credit(s);
Instructor: Janardan,Ravi
Description: Student may contact the instructor or department for information.

CSci 5481 Computational Techniques for Genomics
3 credit(s);
Instructor: Karypis,George
Description: This course provides an introduction to the various computational techniques that are used to analyze the biological data generated by genome sequencing, proteomics, and cell-wide measurements of gene expression changes. The topics that are covered include algorithms for single and multiple sequence alignments, algorithms for sequence assembly, search algorithms for sequence databases, phylogenetic tree construction algorithms, algorithms for gene and promoter prediction, protein structure prediction, statistical methods and data mining algorithms for micro array expression analysis, algorithms for reverse engineering of regulatory networks.
Style: 80% Lecture, 20% Discussion.
Grading: 30% mid exam, 40% final exam, 30% reports/papers.
Exam Format: Essay

CSci 5511 Artificial Intelligence I
3 credit(s); [2011 or instr consent], grad student
Credit will not be granted if credit has been received for: CSCI 4511W;
Instructor: Papanikolopoulos,Nikolaos P
Description: Student may contact the instructor or department for information.

CSci 5523 Introduction to Data Mining
3 credit(s);
Instructor: Kumar,Vipin
Description: This course will give a rapid and vigorous introduction to the field of data mining, as well as provide extensive hands-on experience via small data mining projects. Topics include the following: data pre-processing techniques, data types, similarity measures, data visualization/exploration; predictive models (e.g., decision trees, SVM, Bayes, K-nearest neighbors, bagging, boosting) and model evaluation techniques; clustering (hierarchical, partitional, density-based), association analysis; anomaly detection; case
studies from areas such as earth science, the Web, network intrusion, and genomics.

CSci 5525 Machine Learning
3 credit(s);
Instructor: Banerjee, Arindam
Description: Student may contact the instructor or department for information.

CSci 5551 Introduction to Intelligent Robotic Systems
3 credit(s);
Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 5707 Principles of Database Systems
3 credit(s); [4041 or instr consent ], grad student
Credit will not be granted if credit has been received for: CSCI 4707;
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 5801 Software Engineering I
3 credit(s);
Instructor: Heimdahl, Mats
Description: Advanced introduction to software engineering intended for graduate students. Software life cycle; development models; software requirements analysis; introduction to software design, coding, testing, and maintenance.
Style: 100% Lecture.

CSci 5980 Special Topics in Computer Science: Distributed Storage Systems
1 credit(s), max credits 9, 9 completions allowed;
Instructor: O’Keefe, Matthew Thomas
Description: Student may contact the instructor or department for information.

CSci 5980 Special Topics in Computer Science: From GPS and Google Earth to Spatial Computing
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Shekhar, Shashi
Description: Student may contact the instructor or department for information.

CSci 5980 Special Topics in Computer Science: Motion in Games
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Guy, Stephen J
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Collins, John
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Karypis, George
Description: Student may contact the instructor or department for information.
CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Hopper, Nicholas J
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Whalen, Michael W
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Zhang, Zhi-Li
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Barry, Phillip
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Konstan, Joseph Andrew
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Boley, Daniel L
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Papanikolopoulos, Nikolaos P
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Riedl, John T
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Janardan, Ravi
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Saad, Yousef
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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Instructor: Sturtivant, Carl
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Kumar, Vipin
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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Instructor: Tripathi, Anand R
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CSci 5991 Independent Study
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Instructor: Du, David Hung-Chang
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CSci 5991 Independent Study
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Instructor: Heimdahl, Mats
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CSci 5991 Independent Study
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Instructor: Shekhar, Shashi
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Instructor: Gini, Maria L
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1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Schrater, Paul Robert
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Srivastava, Jaideep
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Interrante, Victoria
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Kuang, Rui
Description: Student may contact the instructor or department for information.
CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Weissman, Jon B
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: He, Tian
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Nadathur, Gopalan
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Meyer, Gary W
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Van Wyk, Eric
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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Instructor: Terveen, Loren Gilbert
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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Instructor: Roumeliotis, Stergios
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CSci 5991 Independent Study
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Instructor: Chandra, Abhishek
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Instructor: Mokbel, Mohamed F
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Instructor: Banerjee, Arindam
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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Instructor: Keefe, Daniel F
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Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
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Instructor: Karypis, George
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Instructor: Hopper, Nicholas J
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CSci 5994 Directed Research
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CSci 5994 Directed Research
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Instructor: Yew, Pen-Chung
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Instructor: Zhang, Zhi-Li
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CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Collins, John
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Instructor: Karypis, George
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Hopper, Nicholas J
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Whalen, Michael W
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
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Instructor: Zhang, Zhi-Li
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CSci 5996 Curricular Practical Training
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Instructor: Konstan, Joseph Andrew
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Boley, Daniel L
Description: Student may contact the instructor or department for information.
CSci 5996 Curricular Practical Training  
S-N only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Papanikolopoulos,Nikolaos P  
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training  
S-N only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Riedl,John T  
Description: Student may contact the instructor or department for information.

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Instructor: Du,David Hung-Chang  
Description: Student may contact the instructor or department for information.

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S-N only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Heimdahl,Mats  
Description: Student may contact the instructor or department for information.

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S-N only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Shekhar,Shashi  
Description: Student may contact the instructor or department for information.

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S-N only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Gini,Maria L  
Description: Student may contact the instructor or department for information.

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S-N only, 1 credit(s), max credits 3, 3 completions allowed;
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Srivastava, Jaideep
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Interrante, Victoria
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Kuang, Rui
Description: Student may contact the instructor or department for information.

CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Weissman, Jon B
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: He, Tian
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Nadathur, Gopalan
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Meyer, Gary W
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
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CSci 5996 Curricular Practical Training
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CSci 5996 Curricular Practical Training
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CSci 5996 Curricular Practical Training
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CSci 5996 Curricular Practical Training
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 8001 Introduction to Research in Computer Science I
A-F only, 1 credit(s);
Instructor: Karypis, George
Description: Student may contact the instructor or department for information.

CSci 8363 Numerical Linear Algebra in Data Exploration
3 credit(s);
Instructor: Boley, Daniel L
Description: Student may contact the instructor or department for information.

CSci 8701 Overview of Database Research
3 credit(s);
Instructor: Srivastava, Jaideep
Description: Student may contact the instructor or department for information.

CSci 8760 Plan B Project
S-N only, 3 credit(s);
Instructor: Carlis, John Vincent
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CSci 8760 Plan B Project
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CSci 8760 Plan B Project
S-N only, 3 credit(s);
Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 8970 Computer Science Colloquium
S-N only, 1 credit(s);
Instructor: Chandra, Abhishek
Description: Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: System Virtualization
3 credit(s), max credits 27, 9 completions allowed;
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Emerging Models in Bioinformatics
3 credit(s), max credits 27, 9 completions allowed;
Instructor: Kuang, Rui
Description: Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Big Data and the Cloud
3 credit(s), max credits 27, 9 completions allowed;
Instructor: Weissman, Jon B
Description: Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Topics in Computational Logic
3 credit(s), max credits 27, 9 completions allowed;
Instructor: Nadathur, Gopalan
Description: Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Nonlinear mobile robot estimation problems in 3D
CSci 8991 Independent Study
3 credit(s), max credits 27, 9 completions allowed;
Instructor: Roumeliotis,Stergios
Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Carlis,John Vincent
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CSci 8991 Independent Study
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Instructor: Hopper,Nicholas J
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CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Carlis,John Vincent
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Instructor: Isler, Volkan Ibrahim
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Conservation Biology 199 McNeal Hall

CBio 8001 Conservation Biology Seminar
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Blair, Robert B
Description: Student may contact the instructor or department for information.

CBio 8095 Contemporary Problems in Conservation Biology
S-N only, 1 credit(s), max credits 3, 1 completion allowed;
Instructor: Arnold, Todd W.
Description: Student may contact the instructor or department for information.

CBio 8201 How to Excel in Graduate School
S-N only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Vondracek, Bruce
Description: Time management during graduate school; write a proposal to submit to an appropriate funding agency; learn strategies for writing a thesis or dissertation and conducting research successfully; gain a basic understanding of the history and philosophy of science.

Construction Management 20 Ruttan Hall

CMgt 2019 AutoCAD for Construction Managers
2 credit(s);
Instructor: Johnson, Ann M
Description: Introduction to AutoCAD software skills. Learn and apply the techniques of computer-aided design and drafting (CAD) at a job entry level of proficiency. Combined lecture and laboratory.

CMgt 3001 Introduction to Construction
3 credit(s);
Instructor: Kuehni, Rose Marie
Description: Introduction to construction and processes that shape our environment. A discussion of the construction industry, key participants and their vocabulary, building systems, planning and scheduling, project delivery systems, construction documents, sustainability, and project management. Course consists of lectures, site visits, guest speakers.

CMgt 3011 Construction Plan Reading
2 credit(s);
Instructor: Kuehni, Rose Marie
Description: Introductory level course in construction plan reading and construction documents. Course materials include architectural, civil, mechanical, electrical drawings and project manual. The emphasis is on the development of skills necessary for the reading, understanding and interpretation of commercial construction plans and project manuals, including notes, symbols, and plan layout. This course is appropriate for third year Construction Management and CALA students, and at any time for students in IT and other colleges.

CMgt 4011 Construction Documents and Contracts
3 credit(s);
Instructor: Hauser, Stephen George
Description: Definition, interpretation, and utilization of drawings. Specifications, agreements, bidding forms, general conditions. Bonds, contracts, subcontracts, and related documents. Appropriate provisions for minority business participation, such as tax exempt status and wage rates.

CMgt 4013 Legal, Ethical, and Risk Issues in Construction
A-F only, 3 credit(s);
Instructor: Mackay, Deborah
Description: Examination of role of construction management professional in society. Broad principles of conduct for construction management professional as well as specific goals to be achieved in professional performance and behavior and reviews of mandatory requirements.

CMgt 4021 Construction Planning and Scheduling
3 credit(s);
Instructor: Styrlund, Kenneth Andre
Description: Concepts of project planning, scheduling, and control. Understanding project scheduling models with emphasis on the critical path method. Introduction to the techniques used in the industry utilizing commercial software on personal computers. The importance of periodic updating and analysis of schedules and of considering and understanding alternatives will be stressed.

CMgt 4022 Construction Estimating
3 credit(s);
Instructor: Adamson, Mark Richard
Description: Purposes and uses of various kinds of estimates. Techniques for performing quantity take-off, organizing bidding process, requesting and analyzing subcontractor proposals, unit pricing, utilizing published resources, and preparing systems-based estimates. Personal computer programs, spreadsheets, and custom applications to be introduced and used. The linkages between estimates, budgets, cost control systems, and historical cost records will be established.

CMgt 4031 Construction Safety and Loss Control
3 credit(s);
Instructor: Carroll, Mil

CMgt 4193 Directed Study
1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: STAFF
Description: Topic arranged with B.A.S. Construction Management academic adviser. [See B.A.S. Web site at www.cce.umn.edu/bas for additional course information.]

CMgt 4196 Construction Management Internship
S-N only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Hilger, Peter
Description: Career preparation in construction management. Students will gain hands-on work experiences in a construction company, applying coursework in the work place, contributing knowledge of best practices to make a positive impact on the construction industry, and participate in career development exercises.

CMgt 4201 Construction Accounting
A-F only, 2 credit(s);
Instructor: Elthon, Dwight J
Description: Accounting for the construction industry differs significantly from accounting in other businesses and industries. This course focuses mainly on the unique characteristics and dissimilarities which are crucial for all parties involved to understand and manage the construction process. The course will cover those unique aspects of construction financial accounting, managerial accounting, tax planning and auditing.

CMgt 4550 Topics in Construction Management: Residential CMgt Companies & Recent Econ Downturn
A-F only, 1 credit(s), max credits 12, 6 completions allowed;
Instructor: Wagner, Heidi Em
Description: TOPIC: Survival--How Residential Construction Companies Made it Through the Recent Economic Downturn. DESCRIPTION: This is a field-research focused course investigating survival mechanisms and lessons learned by residential construction organizations and companies in the Twin Cities. Students will collect primary and secondary data about the residential construction industry and the economy to answer a set of research questions. Students will develop and use interviewing and data procuring techniques and analysis skills. The final project will be a composite report detailing the effects of the 2007-08 economic downturn on the residential construction industry in the Twin Cities and the survival skills and learning developed by the industry as a result of the recent changes in the economy.

CMgt 4550 Topics in Construction Management: Expanding Your Knowledge Toolbox
A-F only, 1 credit(s), max credits 12, 6 completions allowed;
Instructor: Hilger, Peter
Description: TOPIC: What You Didn't Learn In Class--Expanding Your Knowledge Toolbox DESCRIPTION: In the analogy of the student's knowledge toolbox, this seminar based course will explore concepts equal to that hard-to-find, little used tool buried deep in the box. Seven topics will be presented ranging from construction economics, unions and labor relations, innovative contracting, unique construction site planning strategies, the special needs of construction superintendents, managing construction defects, and discussion of "construction futures" - how the past has informed the present, and speculation on what the future looks like. Each seminar will feature a guest speaker(s) to bring relevance from today's workplace. Students can expect a highly interactive approach both in the classroom and on the course supported website.

CMgt 4562 Building Envelope Design and Construction
A-F only, 2 credit(s);
Instructor: Campbell, David W
Description: Considered the first line of defense against the affects of weather, this course will broadly examine the science behind the design and function of the building envelope, the proper design detailing, and the core construction knowledge needed to implement weather resistant construction of the foundation walls, exterior walls, roofs, and the all-important interface between each of these systems. This course will utilize extensive photographic documentation of actual building envelope failures to illustrate the importance of a properly designed and constructed envelope, as well as utilizing detailing graphics illustrating proper envelope design.
Style: 55% Lecture, 10% Discussion, 5% Small Group Activities, 10% Student Presentation, 5% Demonstration, 10% Guest Speakers, 5% Web Based.

CMgt 4572 Structural Frames and Building Design/Construction
A-F only, 3 credit(s);
Instructor: Curran, Murphy
Description: Investigation of basic contemporary structural systems in masonry, steel and wood framing systems. An exploration of forms and performance of these systems.

Continuing Dental Education 6-406 Moos Tower

CDEd 7303 Postgraduate Contemporary Esthetic Dentistry: Level III--Dental Implants
S-N only, 2 credit(s);
Instructor: Olin, Paul S
Description: Student may contact the instructor or department for information.

CDEd 7306 Postgraduate Contemporary Esthetic Dentistry: Level III--Diagnostic Box
S-N only, 1 credit(s);
Instructor: Olin, Paul S
Description: Student may contact the instructor or department for information.

Cultural Studies and Comparative Literature 235 Nicholson Hall
CSCL 1001 Introduction to Cultural Studies: Rhetoric, Power, Desire
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Brown Jr, Robert L
Description: How did we become who we are? How did we become "women" or "men," 'gay' or 'straight'? Where did we get our tastes in clothes, food, music, and decorative arts? And where did we get our political, religious and philosophical beliefs, our sense of what's logical, natural, and believable? Cultural Studies assumes that the world around us (our culture) means, and that its meanings are central in creating us--individually and collectively. And it assumes culture can be "read." CSCL 1001 explores cultural reading, examining the "texts" around us: music videos, television and film, some paintings and photographs, magazine ads, poetry, a graphic novel, science and science journalism, and some "practices" from everyday life: dress, manners and body decoration. The "rhetoric" of culture transmits a view of the world and our loyalty to that view. Its systems of "power" fold us and our texts into large, historical conversations and struggles over ideas and social positions. And the operations of "desire" direct who and what we love, where we find pleasure and how these pleasures figure in the process of making and reproducing culture. It's a basic course for majors and non-majors interested in making sense of their worlds.
Style: 20% Lecture, 20% Discussion, 40% Small Group Activities, 20% Web Based. Active-learning class with participation figuring largely in grade. On-line community / blog activity throughout course.
Grading: 15% final exam, 30% special projects, 20% journal, 15% class participation, 20% other evaluation. Many engaging, short, blog-based and group activities throughout the course. Do what we tell you, and you'll do just fine.
Exam Format: open-book; short, guided answers

CSCL 1101 Literature
4 credit(s); Meets CLE req of Literature
Instructor: Tageldin, Shaden M
Description: What is literature? Look up the word in an English dictionary, and you will find that it once referred to knowledge--in the broadest sense--gleaned from reading. Today the term "literature" embraces all things printed, from fiction to nonfiction to advertising (yes, even your junk mail), from highbrow to low. Visit a U.S. bookstore, however, and you are likely to find a section called "fiction and literature"--a banner that at once narrows literature "to" fiction and excludes literature "from" fiction, styling the former "high" culture. Leave the Western world and one confronts other words often taken to translate "literature," like the Arabic _adab_ or the Sanskrit _kavya_. Are these "literature"? This course will take a comparative view of the term "literature" as well as its ideas, practices, and forms. Reading texts by a variety of writers from different times and places, we will ask ourselves whether, how, and why notions of the literary translate--or don't--across the languages, cultures, and times of the world. We will look at familiar forms of "literary" expression (epic and lyric poetry, drama, the novel, short fiction, and essays) and others that defy conventional Western understandings of genre. Finally, we will explore the relations of literature to orature (oral texts), to visual media, and to the Internet and new media. Given that "literature" historically has been tied to writing, to print, or to the book, what does it mean to study literature today--in an age when the book (and possibly print itself) may be vanishing? The course satisfies CLA's Council on Liberal Education (CLE) Core requirement in Literature.
Style: 60% Lecture, 10% Film/Video, 30% Discussion.
Grading: 80% reports/papers, 20% class participation. Class Participation grade includes mandatory attendance, in-class assignments, and contributions to discussion.

CSCL 1201 Introduction to Cinema and Media Culture
4 credit(s); Credit will not be granted if credit has been received for: SMC 1201; Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: The emergence of what is variously referred to as the "Information Age" and "Society of the Spectacle" has made it necessary for us to think critically about the media. Since visual media have the most pervasive influence on our everyday lives, this course will focus on how forms such as advertising, film, and television work, affect perception, and structure meaning. We will read some of the most important theoretical and historical texts that provide insight into our "ways of seeing." No prior exposure to media theory is expected, but although this is an introductory class, students will be expected to read and work through challenging material. We will read a variety of critics who have attempted to analyze cinema and media culture and we will also begin to develop a vocabulary for formal visual analysis.

CSCL 1301W Reading Culture: Theory and Practice
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: STAFF
Description: CSCL 1301W Reading Culture: Theory and Practice 4 credits, meets Lib Ed req of Other Humanities Core; meets Lib Ed req of Writing Intensive Instructor: STAFF Description: This course turns on one central question: How do things 'mean'? Specifically, how do cultural texts mean in relation to each other and to human life in society and across history? 'Cultural texts' are made objects and forms of communication that encode messages and values, and that produce effects--anything from movies, TV shows, magazine ads and rock concerts to 'high art' (paintings, classical music, plays, poems, etc.). The course specifically examines: (1) the role played by cultural forms in creating, maintaining or challenging social boundaries and power relationships; and (2) the ways art and culture function as sites where creative and alternative visions of 'the good life' come into being. Small classes emphasize close reading,
discussion, and practice in critical writing. An introductory course in every sense, it's a good place to start thinking about what "culture" is and how it works. It will also help you develop reading and writing techniques useful for many courses and majors. Class Time: 40% lecture, 60% discussion

CSCL 1401W Reading Literature: Theory and Practice
4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: STAFF
Description: CSCL 1401W Reading Literature: Theory and Practice 4 credits, meets Lib Ed req of Literature Core; meets Lib Ed req of Writing Intensive Instructor: STAFF Description: What is Literature? How do definitions of it differ over time and across cultures? How does literature play a role in the ways people see themselves and others? How do our histories - personal and cultural - determine how we read it? CSCL 1401W examines such questions in relation to larger patterns of culture and power. You'll emerge from the course with a solid sense of the differences among various genres, and the cultural contexts from which they arise - between an epic poem emerging from a Greek city state and a novel by a German civil servant, say. Small classes emphasize close reading, discussion, and practice in critical writing. An introductory course in every sense, it will give you a good sense of the field of Comparative Literature as well as reading and writing skills useful in many other courses and disciplines. Class Time: 40% lecture, 60% discussion

CSCL 1501W Reading History: Theory and Practice
4 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: STAFF
Description: CSCL 1501W Reading History: Theory and Practice 4 credits, meets Lib Ed req of Historical Perspective Core; meets Lib Ed req of Writing Intensive Instructor: STAFF Description: What is history - is it what we get on The History Channel, or is it something else? Who controls it, who decides what gets included and what's important? Why has history become such a hot political topic - textbooks in schools, for example? This course examines such questions, starting from two assumptions: (1) that history can have explanatory power--it can tell us why things got to be the way they are; but (2) that all history comes to us in a mediated way, that is, as a "text" that encodes someone's or some group's version of it. Small classes focus on reading a variety of texts "in" history - the Mall of America, a Nazi rally, a 17th century Dutch painting; "history on television," the representation of the human body, etc., as well as some critical theory "about" history, designed to help you think about its importance, its uses and abuses. Class Time: 40% lecture, 60% discussion

CSCL 1910W Freshman Seminar: Objects of our (Dis)Affection: Myths of Childhood
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive
Instructor: Hubbard, Kysa Koerner
Description: Looking beyond questions of representational truth, this seminar examines and theorizes the relationship between our abstract ways of seeing childhood and the "real," material world from which these visions emerge. Beginning with the fundamental question of what a "child" is -- and the equally fundamental understanding that the ideas surrounding it are always shot through with issues of class, race, gender, politics and ideology -- we will look through the prisms of three specific, contemporary contexts and the ontological problems that each entails: the (sexy?) child, the "normal" child, and the "criminal" child.
Style: 30% Lecture, 20% Film/Video, 30% Discussion, 20% Small Group Activities.
Grading: 40% reports/papers, 10% quizzes, 20% written homework, 15% in-class presentation, 15% class participation.

CSCL 1910W Freshman Seminar: What is a Poem?
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive
Instructor: Casarino, Cesare
Description: Student may contact the instructor or department for information.

CSCL 1921W Introduction to Film Study
4 credit(s); Credit will not be granted if credit has been received for: ARTH 1921W; Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course is about movies--what they are, how they work, and ways we can watch, read, and enjoy them with a critical eye. Our basic questions are: How do films make meaning? How do they construct a world for us, while (often) giving the impression that that constructed world is natural and inevitable? How do films position us as viewers and shape us as subjects? What is the relation between the film text and the political economy of the industry? We'll look at a wide variety of films from different times and places and consider some of the rich diversity of writing known collectively as Film Theory. This is a basic introductory course designed for those who love going to the movies, but want to understand them better.

CSCL 3115 Cinema and Ideology
4 credit(s); Meets CLE req of Arts/Humanities
CSCL 3172 Music as Discourse
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Leppert, Richard
Description: The real or imagined power of music (whether for evil or good), as well as its social uses, and its psychic and cultural meanings have been the subject of human reflection—and anxiety—from Plato to the present. This course will examine the ways in which music can be considered a "discursive practice," i.e., how music participates in the formation of social norms, as well as human consciousness, identities, and attitudes toward the self and others; how and for what purposes music is used; what (and who) distinguishes "music" from "noise"; and why some musics are policed and censored. Two comments by the modern philosopher of music, Theodor Adorno, nicely frame what this course is about: "I believe in the strict knowability of music, because music is itself knowledge, and in its way very strict knowledge"; and "As soon as one starts to discuss music, one enters the realm of thought, and no power on earth has the right to silence this." Blues, country, r & b, punk, rock, jazz, opera, orchestral, and other musics.
Style: 60% Lecture, 20% Discussion, 20% Web Based. Web work involves participation in course blog
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% additional semester exams. 3 exams (including final), each worth 25% of total grade + 4 or 5 blog assignments (listed above as "reports/papers")
Exam Format: principally essay

CSCL 3173W The Rhetoric of Everyday Life
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Scandura, Jani
Description: Student may contact the instructor or department for information.

CSCL 3177 On Television
4 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Labidi, Imed
Description: That the impact of television on our daily life, political views, and social habits is stronger than ever before is perhaps unarguably correct. Television, consumer society, and the culture of commercialism, as Benjamin would argue replaced the real world by representations of the real. Sustained with the rapid reproduction and replication of auditory and visual images, embedded messages, and manipulative advertising strategies, these simulations serve to validate ideas about culture, behavior, gender, race, class, and social interaction, while promoting commercial values. Hence, the purpose of this course is to use a variety of critical approaches to study mass media and address analytical questions such as: who owns the media? Who are the architects behind certain programs? What are their intentions? Has television been transformed into an elitist instrument of hegemony? And how does it manage to shape consciously or subconsciously our beliefs, attitudes, and understanding of abstract concepts such as beauty. Answers to these questions will help us understand how the role of television developed over time. Through the study of different formats of production, theories of spectatorship, and the alliance between television and the state we uncover certain how propagandist ideas are transmitted to legitimize discipline, obedience, and conformity and place them among the highest values in society. Readings: 50-100 pages Assignments: 3 Essays, 1 presentation, a final 8-page paper

CSCL 3177 On Television
4 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Gill, Meredith Morgan
Description: This course examines television as a technology that should be neither completely dismissed (i.e., "Everything on TV is stupid") nor uncritically embraced. Television has a complex history that has served to both unite social groups and atomize and anesthetize individuals. Accordingly, we will approach television as a complex cultural institution that not only entertains, but also largely determines the stories we tell ourselves. We will study writings on television and specific TV shows from a variety of angles to understand the rise of American broadcast technologies, how race and class are crafted on TV, representations of gender and the home, postmodernity, the demise of taste, what constitutes "reality" in our present historical moment, and changes in the televisual technologies.
Style: 50% Lecture, 50% Discussion.
Grading: 50% reports/papers, 15% special projects, 20% reflection paper, 15% in-class presentation.
CSCL 3321W Theories of Culture
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Ganguly, Keya
Description: The goal of the course is to build a conceptual and historical framework for understanding "culture." While the study of culture has emerged as central to a number of different disciplines (such as anthropology, cultural studies, history, literature, sociology, media criticism, or theatre studies) what remains less well understood are the terms and problems that shape disciplinary investigations of cultural objects, ideas, and practices. Accordingly, we will examine the central definitional issues that accompany the term "culture," and examine key theoretical problems addressed in various approaches to cultural analysis. Our guiding questions will be: What is at stake in thinking about culture? How does culture serve as the terrain on which everyday life is understood and narrated? Who are the major theorists and critics of culture? How do terms such as "culture" and "civilization" define our aesthetic and political judgments about "value"?

CSCL 3361 Visions of Nature: The Natural World and Political Thought
3 credit(s); Credit will not be granted if credit has been received for: EEB 3361; Meets CLE req of Environment
Instructor: Butler, Justin
Description: Student may contact the instructor or department for information.

CSCL 3456W Sexuality and Culture
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Hubbard, Kysa Koerner
Description: Looking beyond questions of representational truth, this course explores the modern history of sexuality in the West, examining and theorizing the relationship between the abstract, ever-changing ways in which we have understood it, and the concrete, material ways in which we have subsequently lived it. Readings will include the psychoanalytic writings of Sigmund Freud and Jessica Benjamin, the historical accounts of Thomas Laqueur and Patricia Hill Collins, and the historical-critical analyses of Michel Foucault and Anne Fausto-Sterling.
Style: 30% Lecture, 20% Film/Video, 30% Discussion, 20% Small Group Activities.
Grading: 50% reports/papers, 10% quizzes, 20% written homework, 20% class participation.

CSCL 3456W Sexuality and Culture
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Sweet, S. Paige
Description:

CSCL 3456W Sexuality and Culture
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Cannavino, Thomas Patrick
Description: This course will explore and critique the nineteenth-century invention of "sexuality" and the dualistic logic it uses to create "normative" sexual roles for man and woman, as well as the mutually exclusive "homo-" and "hetero-" categories for organizing "abnormality." We'll approach these questions from a wide variety of disciplinary perspectives, including philosophy, anthropology, medicine, public health, history, film and literary studies. We'll consider representations of sex and sexuality in art by reading literature, viewing films and videos, and listening to recordings that struggle with the relationships between sexuality, ethics, and justice. Of central importance is the construction of a divide between nature and culture as a popular device that organizes thought about human sexual behavior, and we'll spend a great deal of time thinking about ways to complicate and undermine this binary. This is an upper-division, writing-intensive course, and class activities will range from lecture and discussion to small group writing activities, collaborative creative projects, film screenings, and workshop sessions. Class attendance and participation are greatly important to your success in this course.
Grading: 10% mid exam, 10% final exam, 40% reports/papers, 10% quizzes, 20% journal, 10% class participation.

CSCL 3458W The Body and the Politics of Representation
3 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Haines, Christian Philip
Description: Student may contact the instructor or department for information.

CSCL 3461 Monsters, Robots, Cyborgs
3 credit(s); Meets CLE req of Literature
Instructor: Stout, Graeme Allen
Description: This course investigates three inter-related tropes or figures ( Monsters, Robots and Cyborgs) in order to understand why our culture is obsessed with these strange or uncanny representations of life. If all three of these figures are inhuman or non-human,
they are, at the very same time, super human, more than human. What do monsters tell us about ourselves and our own notion of normal? Why do we fear robots? Is it simply that they will take our jobs away from us? Or, do they tell us more about ourselves as parts of economic and social machines than we would care to admit? And, finally, what do cyborgs tell us about our vexed relationship to our own bodies and our own technology? These questions will guide our discussions throughout the term and will lead us to creative and critical readings of our numerous literary, cinematic, scientific, and theoretical texts. Required Course Texts: Philip K. Dick, Do Androids Dream of Electric Sheep? Mary Shelley, Frankenstein Karel Capek, R.U.R. William Gibson Neuromancer Additional Readings available on Moodle

**Style:** 40% Lecture, 20% Film/Video, 30% Discussion, 10% Small Group Activities.

**Grading:** 10% mid exam, 20% final exam, 60% reports/papers, 10% written homework.

**CSCL 3461W Colonial and Postcolonial Literatures and Theory: 1700 to the Present**

3 credit(s); Meets CLE req of Literature

**Instructor:** Tageldin, Shaden M

**Description:** Between 1700 and the 1950s, as one West was being "won" from Native Americans here in the United States, another West dominated and reinvented the rest of the world. While African, Asian, Central and Eastern European, Ottoman, and U.S. empires claimed foreign territories as their own during this period, their regional ambitions were no match for the transcontinental reach of the empires of Western Europe, especially the French and the British. By 1914, fully 85 percent of the earth had become "Western" territory. From a world mapped by modern European empire and remapped by the decolonization struggles of the 1960s and 1970s, when most of the earth's peoples fought to regain self-determination, the globe as we know it was born. In this course, we will explore the imperial roots of our "global" world in literary and theoretical texts by writers from both colonizing and colonized cultures in Africa, the Arab world, South Asia, and Europe. Our discussions will focus on the cultural and psychological dynamics and the political economy of the world under empire, decolonization, and globalization; the debts of nationalism to colonialism, and of globalization to empire; and the imprint of colonialism on migrations and diasporas. We will ask many questions of what we read: Is there art after empire? How do the world's literatures engage colonial conquest, attraction and resistance to colonial power, and the politics of postcolonial nationhood? How do race, ethnicity, religion and secularity, class, gender, and language figure in these engagements? If empire is more alive today than dead, can we speak of the "postcolonial"? Readings will include novels as well as films and theoretical texts. The course satisfies CLA's Council on Liberal Education (CLE) Core requirement in Literature and Theme requirement in Global Perspectives, as well as the Writing Intensive requirement.

**Style:** 75% Lecture, 25% Discussion.

**Grading:** 20% mid exam, 20% final exam, 60% reports/papers.

**CSCL 3557W Close Reading**

3 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive

**Instructor:** Pepper, Thomas Adam

**Description:** The aim of this course is to make students attentive to the fine structures --lexical, grammatical, rhetorical--of pieces of language. While today's students are confronted with a plethora of information, this does not at all mean that they are prepared for organizing, analyzing, criticizing, and understanding this information. It is more important than ever to show students how to become more attuned to the language which encroaches upon them every day, as well as the language they themselves produce. Knowing implies doing. This is not a lecture course. It is writing intensive. Students are presented with a series of literary, critical, philosophical, and political texts. Both in the dialogic format of the classroom, as well as in several short writing exercises, the students learn to approach verbal language not as something transparent and the meaning of which is given at a glance, but which, on the contrary, is made up of ambiguities, metaphors, unfamiliar words, significant repetitions, allusions, breaks in structure, and elements that resist being reduced to a simple meaning that merely represents a state of affairs in the world.

**Style:** 30% Lecture, 70% Discussion.

**Grading:** 10% final exam, 60% reports/papers, 30% class participation.

**Exam Format:** essay

**CSCL 3621W Colonial and Postcolonial Literatures and Theory: 1700 to the Present**

3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature; meets CLE req of Writing Intensive

**Instructor:** Tageldin, Shaden M

**Description:** The figure of the monster has a long history of representing our fears and desires in a world always in flux. This course examines questions that monsters, robots, and cyborgs allow us to pose about social norms, relations of production and reproduction, binaries between natural and unnatural, and links between humans and machines. By examining a variety of philosophical, scholarly, literary, filmic and historical texts, we will attempt to place the post-modern, modern, and postmodern figure of the monster in its philosophical and historical context to understand what monsters tell us about ourselves and our tolerance for difference.

**Style:** 40% Lecture, 20% Film/Video, 30% Discussion, 15% Small Group Activities, 20% Student Presentation.

**Grading:** 65% reports/papers, 20% in-class presentation, 15% class participation. Class Participation grade includes mandatory office hours, attendance, contributions to discussion, and in-class assignments.
CSCL 3910 Topics in Cultural Studies and Comparative Literature: Critical Hollywood
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Hueser, Rembert
Description:

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Bombay Social Film
4 credit(s), max credits 32, 8 completions allowed;
Instructor: Ganguly, Keya
Description: Student may contact the instructor or department for information.

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Stuff: Making Matters
3 credit(s), max credits 32, 8 completions allowed;
Instructor: Scandura, Jani
Description: Student may contact the instructor or department for information.

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Work of Translation: Theory, Function, & Practice
3 credit(s), max credits 32, 8 completions allowed;
Instructor: Allen, Joseph R
Description: Student may contact the instructor or department for information.

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Political Documentaries
3 credit(s), max credits 32, 8 completions allowed;
Instructor: Hueser, Rembert
Description: Student may contact the instructor or department for information.

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Russian and Eastern European Film and Film Theory
4 credit(s), max credits 32, 8 completions allowed;
Instructor: Lovejoy, Alice Osborne
Description: Student may contact the instructor or department for information.

Curriculum and Instruction
145 Peik Hall

CI 1001 Introduction to the Elementary School
A-F only, 3 credit(s);
Instructor: Berken, Shelley
Description: Student may contact the instructor or department for information.

CI 1001 Introduction to the Elementary School
A-F only, 3 credit(s);
Instructor: Rosebrook, Cheryl K
Description: CI 1001 - Introduction to the Elementary School (3.0 cr; A-F or Aud, fall, spring, every year) Introduction to the Elementary School is intended to be a beginning course for undergraduate students considering a career in the field of education or a Foundations of Education major. The class examines various aspects of elementary schools and elementary teaching with an emphasis on urban elementary settings. Contemporary students and families, school organization, standards, assessment, policy, culture, diversity, and the role of the teacher are addressed. Issues of equity and equality are explored throughout the course. Visits to educational settings provide key experiences.

CI 1903 Freshman Seminar: Citizenship and Public Ethics: Intentional Communities As Education For Life
3 credit(s), max credits 6; Meets CLE req of Civic Life and Ethics
Instructor: Englund, Lynn A.
Description: Students in this class look at historic and contemporary examples of intentional communities to see what ideals for social change motivated their formation. Students also discuss the communities in which they participate to think about what it is to bring intention to what we do. And we create an intentional community within our classroom where people get to know each other and share stories from their experience and comment on readings and videos. There are four reflective essays and a final paper, but no tests or exams.
Style: 10% Film/Video, 65% Discussion, 10% Small Group Activities, 10% Student Presentation, 5% Guest Speakers. Students share stories from their experience to help connect course concepts to lived experience of family and community life.
Grading: 15% reports/papers, 40% reflection paper, 5% in-class presentation, 40% class participation. On-time class attendance and
in class participation is important. Participation includes listening attentively to others and being prepared to share your response to readings and videos.

Exam Format: No exams.

CI 1905 Freshman Seminar: Technology and Society: Journey of Self-Discovery: Insight into Male Exper
A-F only, 3 credit(s);Meets CLE req of Technology and Society
Instructor: Nystuen,Sara Louise
Description: Student may contact the instructor or department for information.

CI 2311W Introduction to Technology and Ethics in Society
3 credit(s);credit will not be granted if credit already received for: WHRE 3011W or CI 3311WCredit will not be granted if credit has been received for: CI 4311W;Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Schwartz,Derek E
Description: Student may contact the instructor or department for information.

CI 2311W Introduction to Technology and Ethics in Society
3 credit(s);credit will not be granted if credit already received for: WHRE 3011W or CI 3311WCredit will not be granted if credit has been received for: CI 4311W;Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Koseoglu,Suzan
Description: Student may contact the instructor or department for information.

CI 2311W Introduction to Technology and Ethics in Society
3 credit(s);credit will not be granted if credit already received for: WHRE 3011W or CI 3311WCredit will not be granted if credit has been received for: CI 4311W;Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Feyissa,Solen Desalegn
Description: Student may contact the instructor or department for information.

CI 2312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s);Credit will not be granted if credit has been received for: CI 4312;Meets CLE req of Technology and Society
Instructor: Lin,Jing-Huey
Description: Student may contact the instructor or department for information.

CI 2312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s);Credit will not be granted if credit has been received for: CI 4312;Meets CLE req of Technology and Society
Instructor: Pazurek,Angelica
Description: This discussion-based course is designed as an introductory exploration of the current dangers lurking on the Internet, particularly for children, and those which could potentially arise with future developments and innovations. A humanitarian perspective will provide the lens by which we will examine universal concerns and explore strategies and measures we can take in the community as well as in educational institutions to combat these dangers. As we investigate the impact of online technologies within educational environments, we will also focus our attention on their potential for teaching and learning. All topics will be introduced and discussed in terms of current educational practices.

CI 2312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s);Credit will not be granted if credit has been received for: CI 4312;Meets CLE req of Technology and Society
Instructor: North,Sarah
Description: Student may contact the instructor or department for information.

CI 3001 Survey of Art Activities
A-F only, 2 credit(s);
Instructor: Delisle,Heather A
Description: Student may contact the instructor or department for information.

CI 3001 Survey of Art Activities
A-F only, 2 credit(s);
Instructor: Johnson,Jeremy L
CI 3151W Culture, Power, and Education  
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive  
Instructor: Lozenski, Brian David  
Description: Student may contact the instructor or department for information.

CI 3211 Introduction to Elementary Teaching  
A-F only, 3 credit(s);  
Instructor: Berken, Shelley  
Description: Student may contact the instructor or department for information.

CI 3211 Introduction to Elementary Teaching  
A-F only, 3 credit(s);  
Instructor: Byrn, Katherine Margaret  
Description: Student may contact the instructor or department for information.

CI 3212 Practicum: Elementary Teaching  
S-N only, 2 credit(s);  
Instructor: Wiley, Bethann Marie  
Description: Course Description This is a field-based practicum for students enrolled in their introductory block of elementary education methods classes. Students are expected to apply learning from their university courses to the elementary school setting. Students will engage in in-class discussions and online reflection about the application of classroom learning to the school setting.

CI 3212 Practicum: Elementary Teaching  
S-N only, 2 credit(s);  
Instructor: Ahlgren, Erica Jean  
Description: Course Description This is a field-based practicum for students enrolled in their introductory block of elementary education methods classes. Students are expected to apply learning from their university courses to the elementary school setting. Students will engage in in-class discussions and online reflection about the application of classroom learning to the school setting.

CI 3283 Practicum: Special Education K-6  
S-N only, 2 credit(s);  
Instructor: Pinto, Viveca Victoria  
Description: Student may contact the instructor or department for information.

CI 3401W Diversity in Children’s Literature  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Rapport, Rebecca T  
Description: Student may contact the instructor or department for information.

CI 3401W Diversity in Children’s Literature  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Struck, Maggie Ann  
Description: Student may contact the instructor or department for information.

CI 3401W Diversity in Children’s Literature  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Rogers, Aimee A  
Description: Student may contact the instructor or department for information.

CI 3610 Linguistics for Teachers  
A-F only, 3 credit(s); Meets CLE req of Social Sciences  
Instructor: Godfrey, LeeAnne Berger  
Description: The course is designed to provide future K-6 pre-service teachers (PTs) with a general introduction to the field of linguistics, the scientific study of language. PTs will learn about linguistic terminology, acquire a deeper understanding of the English language, and learn to apply methods of linguistic analysis (both to English and to other languages). PTs will be become familiar with theories and research about how both first and other languages are learned, and will critically analyze some of the educational
implications of language use, learning and policy. In the first half of the course, PTs will learn how to describe and analyze the sound, form, and meaning patterns of language, and of English in particular. We begin with the physical and mental aspects of speech sound production, moving on to an examination of linguistic structure and meaning, and building toward a greater understanding of the ways in which people use and interpret language in different contexts. In learning about the various subsystems of language, PTs will acquire not only new ways of thinking about language, but also the ability to extract regularities from linguistic data in unfamiliar languages. With this as a foundation, we will move on to exploring a variety of issues in applied linguistics (specifically, how first and second languages are learned) and sociolinguistics (language and culture, dialect variation, and language and politics) with an emphasis on how these issues relate to education and classroom teaching.

CI 4311W Technology and Ethics in Society
3 credit(s); credit will not be granted if credit already received for: CI 5311, WHRE 5011W
Credit will not be granted if credit has been received for: CI 2311W; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Schwartz, Derek E
Description: Student may contact the instructor or department for information.

CI 4311W Technology and Ethics in Society
3 credit(s); credit will not be granted if credit already received for: CI 5311, WHRE 5011W
Credit will not be granted if credit has been received for: CI 2311W; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Koseoglu, Suzan
Description: Student may contact the instructor or department for information.

CI 4312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CI 2312; Meets CLE req of Technology and Society
Instructor: Lin, Jing-Huey
Description: Student may contact the instructor or department for information.

CI 4312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CI 2312; Meets CLE req of Technology and Society
Instructor: Pazurek, Angelica
Description: This discussion-based course is designed as a critique and analysis of the current dangers lurking on the Internet, particularly for children, and those which could potentially arise with future developments and innovations. A humanitarian perspective will provide the lens by which we will examine universal concerns and explore strategies and measures we can take in the community as well as in educational institutions to combat these dangers. As we investigate the impact of online technologies within educational environments, we will also focus our attention on their potential for teaching and learning. All topics will be introduced and discussed in terms of current educational practices.

CI 4312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CI 2312; Meets CLE req of Technology and Society
Instructor: North, Sarah
Description: Student may contact the instructor or department for information.

CI 4413 Practicum: Working With Developing Readers
S-N only, 2 credit(s);
Instructor: Allen, Kathryn Elizabeth Lawyer
Description: Student may contact the instructor or department for information.

CI 4413 Practicum: Working With Developing Readers
S-N only, 2 credit(s);
Instructor: Ortmann, Lisa Louise
CI 4413 Practicum: Working With Developing Readers
   S-N only, 2 credit(s);
   Instructor: Brodeur,Katherine
   Description: Student may contact the instructor or department for information.

CI 5065 Improving Art Programs in the Schools
   A-F only, 3 credit(s);
   Instructor: Bequette,James W
   Description: Issues of art instruction, including teaching methods and evaluation, philosophical frameworks of pedagogy, and institutional issues concerning art programs in primary and secondary schools; social and cultural structures of schooling, practical issues of teaching art.

CI 5069 Curriculum Innovations in Art Education
   A-F only, 3 credit(s);
   Instructor: Johnson,Jeremy L
   Description: Student may contact the instructor or department for information.

CI 5075 The Social and Historical Foundations of Art Education
   A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: Maloney Leaf,Betsy
   Description: Student may contact the instructor or department for information.

CI 5096 Art Education: Practicum
   A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
   Instructor: STAFF
   Description: Issues of art instruction, including teaching methods and evaluation, philosophical frameworks of pedagogy and institutional issues concerning art programs in primary and secondary schools. Practicum requiring students to work in a public school setting.

CI 5155 Contemporary Approaches to Curriculum: Instruction and Assessment
   A-F only, 3 credit(s);
   Instructor: Casey,Zachary Anders
   Description: Student may contact the instructor or department for information.

CI 5156 Popular Culture, Teaching, and Learning
   A-F only, 3 credit(s);
   Instructor: Swiss,Thom
   Description: Student may contact the instructor or department for information.

CI 5177 Practical Research
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: Preparation for identifying a research and development topic, reviewing the existing knowledge on the topic, planning and carrying out a project, further investigating the topics, and writing a report on the project.

CI 5181 Clinical Experience in Elementary School Teaching
   S-N only, 2-8 credit(s), max credits 16, 3 completions allowed;
   Instructor: Carlson,Ann Ruhl
   Description: Students spend full days in the elementary classroom gradually assuming responsibility for teaching the class. Students prepare a portfolio based on criteria given. One seminar per week.

CI 5186 School-Related Projects
   A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: STAFF
   Description: Research or evaluation project related to teaching, curriculum, or other aspect of schooling. Approved and supervised by faculty adviser.
CI 5187 Practicum: Improvement of Teaching in Elementary or PreKindergarten Schools  
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: STAFF  
Description: Elementary school classroom teaching project designed to improve specific teaching skills. Approved and directed by advisor.

CI 5190 Directed Individual Study in Curriculum and Instruction  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: STAFF  
Description: Directs students to individual studies that focus on producing and evaluating curriculum materials; literature review of issues and problems; and assessing curriculum processes.

CI 5285 Clinical Experience in Elementary School Teaching  
S-N only, 12 credit(s), max credits 24;  
Instructor: Byrn,Katherine Margaret  
Description: Student may contact the instructor or department for information.

CI 5286 Student Teaching Seminar: Elementary Education  
A-F only, 3 credit(s), max credits 6;  
Instructor: Byrn,Katherine Margaret  
Description: Student may contact the instructor or department for information.

CI 5301 Foundations of Computer Applications for Business and Education  
3 credit(s);  
Instructor: Peterson,Darrell Howard  
Description: This course examines the instructional uses of computers and representative business, education, and marketing applications, including word processing, spreadsheets, and web design. This is an online course with all course activities being completed online through the University's course management system, Moodle (http://myu.umn.edu). We will be guided by the following themes and questions: (1) Computer Literacy and Proficiency and Business Software - How should educators prepare students for the necessary computer literacy skills (ie word processing, presentation, data analysis software, web browsing, etc) needed in their personal and professional lives? - How should the fields of education and business address the changing role of client based software applications to web based applications? (2) Computer Supported Cooperative Work, Virtual Collaboration Tools for Business and Education - How are communication tools like email, instant messaging, and SMS converging? - How is mobile computing shaping the way businesses function? - What opportunities and challenges do businesses and educators have using web conferencing tools (Adobe Connect, WebEx, Elluminate)? - How are video/tele conferencing systems (webcams, ITV) and voice over IP systems (ie Skype) changing collaboration opportunities? - In what ways are knowledge management systems (knowledge bases/wikis) influencing business operations? (3) Authoring on the Web - What are the differences between basic web languages (HTML/CSS) and web-based applications/content management systems? - How can educators and a business provide a presence on the web? - What are the best ways to provide web development opportunities for students? (4) Using a Course Management System in the Workplace or School - How can educators and a business provide a presence on the web?  
Style: 100% Web Based. Nearly entirely asynchronous, with the exception of one group project which requires scheduling a synchronous meeting.

CI 5303 Data Analysis and Information Design for Business and Education  
3 credit(s);  
Instructor: Horazdovsky PhD,Jerry Edward  
Description: Student may contact the instructor or department for information.

CI 5325 Designing and Developing Online Distance Learning  
A-F only, 3 credit(s);  
Instructor: Doering,Aaron H  
Description: Students research, use, and evaluate technologies for distance learning and design their own learning environments.
CI 5331 Introduction to Learning Technologies
3 credit(s);
Instructor: Doering, Aaron H
Description: This course is designed to prepare you to become knowledgeable and comfortable in the field of learning technologies (LT). Upon completing this course you will understand the history of the LT field; understand what LT is along with the theoretical foundations of the field; be able to discuss the role of LT in education and the workplace; know and understand the major debates and articles of the LT field; and be able to write, communicate, and present your knowledge of the LT field. This is a great course to begin your learning technologies experience!
Style: 15% Lecture, 45% Discussion, 20% Small Group Activities, 20% Student Presentation.

CI 5336 Planning for Multimedia Design and Development
3 credit(s);
Instructor: Koivula, Matti Juhani
Description: Student may contact the instructor or department for information.

CI 5351 Technology Tools for Educators
A-F only, 3 credit(s);
Instructor: STAFF
Description: Develop skills in using selected technology applications to support teaching and learning. Internet applications, presentation software, multimedia authoring tools, desktop publishing software, Web page creation. May also include a field-site project.

CI 5361 Teaching and Learning with the Internet
3 credit(s);
Instructor: Bakir, Nesrin
Description: Student may contact the instructor or department for information.

CI 5362 Foundations of Interactive Design for Web-based Learning
3 credit(s);
Instructor: Armagost, Andrea Lynn
Description: Student may contact the instructor or department for information.

CI 5367 Interactive Multimedia Instruction
A-F only, 3 credit(s);
Instructor: Miller, Charles De Vaughn
Description: In this course, we will explore a variety of common design heuristics; however, you will modify these to meet and continually refine your personal design perspective and style. We will become better designers through discussion, research, exploration, collaboration, development, and simply?design. Ultimately, we will form small design teams to explore unique instructional problems and develop, implement, and evaluate innovative instructional design solutions. Parallel to student design and development, we will examine the design lifecycle and authentic context of two Learning Technologies projects that will be in production during the Spring semester: 1) GeoThentic - an online environment that creates opportunities for students to learn with geospatial technologies by solving authentic, complex problems, and 2) AvenueDHH - A Flash-based progress-monitoring intervention in the area of reading, writing, and language development for use with children who are deaf or hard-of-hearing. Students with basic design and development skills in at least one of the following domains (HTML, CSS, Flash, Photoshop, PHP/ASP, JavaScript, database design, Flash Media Server, FLEX, video editing, etc.) are encouraged to sign up for the course.
Style: 20% Discussion, 40% Small Group Activities, 40% Studio.

CI 5404 Culturally Diverse Books for Children and Adolescents
A-F only, 3 credit(s);
Instructor: Galda, Lee
Description: What is culturally diverse literature and where do we find it? How do we determine authenticity: Who speaks for what group? This course will explore the development of African-American, Asian-American, Latino/a, and Native American literature for children and adolescents, as well as literature that reflects other diversities such as class, gender, sexual orientation, and exceptionalities, as well as literature that is international in scope. In addition to reading and discussing articles and representative books, we will also consider how to use books to promote cross-cultural understanding, and transform existing curriculum.

CI 5410 Special Topics in the Teaching of Literacy
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Lensmire, Timothy J.
Description: This course explores the politics of literacy and race in classrooms (with politics understood both as how power plays out and in relation to creating democratic forms of life in schools). Theoretical and historical resources are developed first. Bakhtin's writings on language—including his concepts of utterance, speech genre, and heteroglossia—help us explore the social life of language and literacy as they get used in different contexts by different people. Then, we take up two writers who characterize the racial situation in the US in different (but complementary) ways. Historian Matthew Jacobson helps us understand the historical fabrication, changeability, and contingencies of whiteness, with an eye to the power relations and social havoc it has generated; and the Reverend Thandeka, drawing on psychoanalytic theory and history, supports our examination of the racial identities created by our society and how these identities often undermine action that might improve our racial situation. With these beginnings, the course shifts to the close exploration of the workings of literacy and race in schools. We examine talk about race in educational settings and the larger educational community, and find that while it is often muted (as in Mica Pollock's ethnographic study), it also always has the potential of exploding into loud controversy (as in the debate over Ebonics, chronicled by Theresa Perry and Lisa Delpit). And we examine the work and lives of teachers and students in schools, with the help of Bob Fecho's writing on his attempts to teach English in progressive ways and Daniel Yon's research with youth as they create identities in 'global times.' Finally, we complicate and revise our emerging ideas one last time, as we work with texts and films chosen by members of the class. As educators, scholars, and citizens, we have responsibilities to participate intelligently and critically in conversations about school and society—especially as school and society continue to privilege some at the expense of others. The main goal and method of this course is to bring our own ideas about education, race, and literacy into dialogue with the ideas of others—other members of the class, as well as various researchers and writers. In this process, we will revise and better articulate our images of and commitments to a worthy education for all of our children and fellow citizens.

CI 5410 Special Topics in the Teaching of Literacy
3 credit(s), max credits 12, 12 completions allowed;
Instructor: O'Brien, David
Description: Student may contact the instructor or department for information.

CI 5413 Foundations of Reading
A-F only, 3 credit(s);
Instructor: Allen, Kathryn Elizabeth Lawyer
Description: Student may contact the instructor or department for information.

CI 5413 Foundations of Reading
A-F only, 3 credit(s);
Instructor: Ortmann, Lisa Louise
Description: Student may contact the instructor or department for information.

CI 5413 Foundations of Reading
A-F only, 3 credit(s);
Instructor: Brodeur, Katherine
Description: Student may contact the instructor or department for information.

CI 5425 Reading Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Briguet, Kathleen Mary
Description: Student may contact the instructor or department for information.

CI 5425 Reading Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Boardman, Alyssa M
Description: Student may contact the instructor or department for information.

CI 5425 Reading Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Martin-Kerr, Keitha-Gail
Description: Student may contact the instructor or department for information.

CI 5426 Language Arts Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Peterson, Debra Stevens
CI 5426 Language Arts Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Helman, Lori A
Description: Student may contact the instructor or department for information.

CI 5426 Language Arts Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Martin-Kerr, Keitha-Gail
Description: Student may contact the instructor or department for information.

CI 5433 Instructional Leadership in Reading for the Middle and Secondary Grades
A-F only, 3 credit(s);
Instructor: Rummel, Andrew Michael
Description: Student may contact the instructor or department for information.

CI 5435 Instructional Leadership in Preventing Reading Difficulties
A-F only, 3 credit(s);
Instructor: Frederick, Amy Rae
Description: Student may contact the instructor or department for information.

CI 5441 Teaching Literature in the Secondary School
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Pyscher, Tracey Michelle
Description: Student may contact the instructor or department for information.

CI 5442 Literature for Adolescents
A-F only, 3 credit(s);
Instructor: Laster, Lori A
Description: Student may contact the instructor or department for information.

CI 5451 Teaching Reading in Middle and Secondary Grades
A-F only, 3 credit(s);
Instructor: Kolb, Christopher L
Description: Student may contact the instructor or department for information.

CI 5472 Teaching Film, Television, and Media Studies
A-F only, 3 credit(s);
Instructor: Swiss, Thom
Description: Methods of teaching film, video, and media studies at the secondary and college level; methods for eliciting critical responses; analysis of film/video techniques; analysis of cultural representations and genre characteristics; connecting and comparing film/video and literature; studying documentary and television news; developing media studies units. REQUIRED TEXT: Media Literacies: A Critical Introduction Author: Michael Hoechsmann and Stuart R. Poyntz ; Edition: ; ISBN: 1405186100 Publisher: Wiley Blackwell
Style: 100% Web Based.
Grading: 100% reflection paper. No exams. Posts, comments, and papers using a blog.

CI 5496 Directed Experiences in Teaching English
S-N only, 8 credit(s);
Instructor: STAFF
Description: Student teaching/clinical experience for English post-baccalaureate students only.

CI 5502 Science Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Billington, Barbara Lynne
Description: Student may contact the instructor or department for information.
CI 5502 Science Instruction in the Elementary Grades  
A-F only, 3 credit(s);  
Instructor: Johnson, Roger T  
Description: Student may contact the instructor or department for information.

CI 5502 Science Instruction in the Elementary Grades  
A-F only, 3 credit(s);  
Instructor: Upadhyay, Bhaskar  
Description: Student may contact the instructor or department for information.

CI 5531 Teaching Middle School Science  
A-F only, 3 credit(s);  
Instructor: Billington, Barbara Lynne  
Description: The central themes of the course are: 1) Promoting inquiry, research, and reflection; 2) Honoring the diversity of our communities and learners; and 3) Fostering a commitment to lifelong learning and professional development. The purpose of this course is to examine science teaching in the middle school and help you inquire and reflect about your own teaching practice and its impact on you and your students. Throughout this course we will collaboratively inquire about teaching and learning, observe and analyze instruction, and reflect on your own and each others' science teaching. Ultimately this course is designed to not only support you during the practicum experience, but also help you learn how to use various instructional techniques and methods, and to inquire and reflect upon your teaching during this semester and beyond.

CI 5536 Equity, Policy, and Assessment in Science Education  
A-F only, 3 credit(s);  
Instructor: Upadhyay, Bhaskar  
Description: Nature of equity, diversity, and policy matters that influence schools/teachers involved in science teaching and scientific literacy. Classroom presentations, discussions, readings in current research.

CI 5539 Improving Secondary Science Instruction: Surviving the First Two Years  
A-F only, 3 credit(s);  
Instructor: Billington, Barbara Lynne  
Description: Student may contact the instructor or department for information.

CI 5540 Special Topics: Science Education  
3 credit(s), max credits 12, 12 completions allowed;  
Instructor: Allchin, Douglas  
Description: Student may contact the instructor or department for information.

CI 5596 Clinical Experience in Middle School Science  
A-F only, 4 credit(s);  
Instructor: Billington, Barbara Lynne  
Description: Student may contact the instructor or department for information.

CI 5619 Teaching World Languages and Cultures in Elementary Settings  
3 credit(s);  
Instructor: Mitchell, Kathleen  
Description: Student may contact the instructor or department for information.

CI 5631 Second Language Curriculum Development and Assessment  
A-F only, 3 credit(s);  
Instructor: Bigelow, Martha  
Description: Student may contact the instructor or department for information.

CI 5632 Literacy and Language Development in Second Language Classrooms  
A-F only, 3 credit(s);  
Instructor: Ranney, Susan Elaine  
Description: Student may contact the instructor or department for information.
CI 5645 Teaching English Learners in the Elementary Classroom
A-F only, 3 credit(s);
Instructor: Young, Amy I
Description: Student may contact the instructor or department for information.

CI 5645 Teaching English Learners in the Elementary Classroom
A-F only, 3 credit(s);
Instructor: Benegas, Michelle Elizabeth
Description: Student may contact the instructor or department for information.

CI 5646 English Grammar for ESL Teachers
3 credit(s);
Instructor: Ranney, Susan Elaine
Description: English syntax from pedagogical perspective. Grammatical structures that challenge ESL learners. Analyzing learner errors. Issues/activities related to teaching grammar in ESL contexts.

CI 5651 Foundations of Second Languages and Cultures Education
A-F only, 3 credit(s);
Instructor: Martel, Jason Peter
Description: Student may contact the instructor or department for information.

CI 5656 Teaching Literacy in Second Language Classrooms
A-F only, 3 credit(s);
Instructor: Ennser-Kananen, Johanna
Description: Student may contact the instructor or department for information.

CI 5658 Foreign Language Testing and Assessment
A-F only, 3 credit(s);
Instructor: Martel, Jason Peter
Description: Problematicizing proficiency; Aligning second language classroom instruction and assessment; fundamental concepts in language assessment; traditional and alternative approaches to assessing proficiency in speaking, listening, reading, writing as well as the three communicative modes; creation of formative and summative assessments; critique of common assessment instruments. The course is designed for all graduate students (M.Ed., M.A., Ph.D.) in the second languages and cultures education program who focus on foreign language teaching contexts (including EFL) and may be of interest to students in other programs who have an interest in foreign language testing and assessment. The course includes a combination of lecture, demonstrations, technology-based and online activities, cooperative group activities, and discussions.

CI 5671 Curriculum Development and Assessment in Dual Language/Immersion Classrooms
3 credit(s);
Instructor: Mitchell, Kathleen
Description: Student may contact the instructor or department for information.

CI 5693 Directed Study in Second Languages and Cultures
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Individual or group work on curricular, instructional, or assessment problems.

CI 5696 Practicum: Teaching World Languages and Cultures in Elementary Schools
2-6 credit(s), max credits 6, 1 completion allowed;
Instructor: STAFF
Description: Teaching and learning experiences in second languages and cultures at the elementary school level. Requires students to work in a public school setting.

CI 5697 Practicum: ESL in the Elementary School
2-6 credit(s), max credits 6, 1 completion allowed;
Instructor: STAFF
Description: Teaching and learning experiences in an English as a second language setting at the elementary school level. Requires students to work in a public school setting.
CI 5698 Student Teaching in Second Languages and Cultures
2-6 credit(s), max credits 14, 5 completions allowed;
Instructor: STAFF
Description: Student teaching in Second Languages and Cultures at the secondary level for teachers already licensed in another field. Requires students to work in a public school setting.

CI 5699 Clinical Experiences in Second Languages
A-F only, 3-12 credit(s), max credits 16;
Instructor: Maguire, Caroline Marie
Description: Student may contact the instructor or department for information.

CI 5702 Social Studies Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Winkelaar, Jessica
Description: Student may contact the instructor or department for information.

CI 5702 Social Studies Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Thompson-Burke, Penny E
Description: Student may contact the instructor or department for information.

CI 5702 Social Studies Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Gregory, Christine Ina Gabrielle
Description: Student may contact the instructor or department for information.

CI 5745 Engaging Youth With Social Studies Texts
A-F only, 3 credit(s);
Instructor: Beach, Todd A
Description: Student may contact the instructor or department for information.

CI 5822 Mathematics Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Wyberg, Terrence R
Description: Student may contact the instructor or department for information.

CI 5822 Mathematics Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Miller, Christina Holly
Description: Student may contact the instructor or department for information.

CI 8095 Problems: Art Education
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Bequette, James W
Description: Student may contact the instructor or department for information.

CI 8131 Curriculum and Instruction Core: Critical Examination of Curriculum in Context
A-F only, 3 credit(s);
Instructor: Lensmire, Timothy J.
Description: Student may contact the instructor or department for information.

CI 8132 Curriculum and Instruction Core: Teaching Theory and Research
A-F only, 3 credit(s);
Instructor: Roehrig, Gillian Heather
Description: Student may contact the instructor or department for information.

CI 8133 Research Methods in Curriculum and Instruction
A-F only, 3 credit(s);
Instructor: Upadhyay,Bhaskar
Description: Survey of educational research methods, comparison of underlying assumptions/procedures.

CI 8145 Using Mixed Methods in Educational Research
A-F only, 3 credit(s);
Instructor: O'Brien,David
Description: Student may contact the instructor or department for information.

CI 8148 Conducting Qualitative Studies in Educational Contexts
3 credit(s);
Instructor: Dillon,Deborah R.
Description: Student may contact the instructor or department for information.

CI 8150 Research Topics Curr & Instruc
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Vagle,Mark D
Description: Student may contact the instructor or department for information.

CI 8150 Research Topics Curr & Instruc
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Avery,Patricia Grant
Description: Student may contact the instructor or department for information.

CI 8150 Research Topics Curr & Instruc
3 credit(s), max credits 12, 12 completions allowed;
Instructor: King PhD,Kendall Amy
Description: Special topics, current research trends in curriculum/instruction. Research review, subject integration, curriculum contexts, development, implementation, data collection, analysis, evaluation.

CI 8154 Culturally Relevant Pedagogy
A-F only, 3 credit(s);
Instructor: Ngo,Bic
Description: Research on relationship between home and school cultures. Education of students of color. Culture, including experiences/practices of students' homes. Cultural approaches for improving teaching, transforming society.

CI 8159 Culture and Teaching Colloquium
A-F only, 3 credit(s), max credits 6;
Instructor: Hermes,Mary Rose
Description: Student may contact the instructor or department for information.

CI 8161 Research Experience I: Study Design and Planning
OPT No Aud, 3 credit(s);
Instructor: Tedick PhD,Diane J
Description: Student may contact the instructor or department for information.

CI 8196 Practicum in Teaching in Colleges of Education
1 credit(s);
Instructor: Avery,Patricia Grant
Description: Student may contact the instructor or department for information.

CI 8196 Practicum in Teaching in Colleges of Education
1 credit(s);
Instructor: Lewis,Cynthia
Description: Student may contact the instructor or department for information.

CI 8391 Learning Technologies Seminar
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Scharber, Cassandra
Description: This course is a Ph.D.-level seminar focused on research and writing in the Learning Technologies field. Students will assume a lead role in developing this course. The course provides up-to-date orientation to the field of LT as well as in-depth study in a range of topics current to LT. The focus of the course is research and academic writing.
Style: 65% Discussion, 10% Small Group Activities, 10% Student Presentation, 5% Demonstration, 5% Studio, 5% Guest Speakers.

CI 8395 Directed Study: Learning Technologies
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Scharber, Cassandra
Description: Student may contact the instructor or department for information.

CI 8400 Special Topics in Children’s and Young Adult Literature
3 credit(s), max credits 6, 6 completions allowed;
Instructor: Galda, Lee
Description: Student may contact the instructor or department for information.

CI 8492 Readings in English Education and Reading
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Galda, Lee
Description: Student may contact the instructor or department for information.

CI 8570 Advanced Topics in Science Education
A-F only, 3 credit(s), max credits 6, 6 completions allowed;
Instructor: Finley, Fred N
Description: Examination/critique of current research topics, methods, and issues.

CI 8595 Problems: Science Education
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Billington, Barbara Lynne
Description: Independent research.

CI 8595 Problems: Science Education
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Johnson, Roger T
Description: Independent research.

CI 8691 Readings in Second Languages and Cultures Education
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Tedick PhD, Diane J
Description: Independent reading.

CI 8695 Problems: Second Languages and Cultures Education
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Tedick PhD, Diane J
Description: Student may contact the instructor or department for information.

CI 8795 Problems: Social Studies Education
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Avery, Patricia Grant
Description: Student may contact the instructor or department for information.

CI 8796 Research Internship in Social Studies Education
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Avery, Patricia Grant
Description: Student may contact the instructor or department for information.

CI 8902 Family, Youth, and Community in Social, Political, and Economic Context
A-F only, 3 credit(s);
Instructor: Englund, Lynn A.
Description: Student may contact the instructor or department for information.

**Dakota 19 Scott Hall**

**Dakota 1121 Beginning Dakota I**
5 credit(s);
Credit will not be granted if credit has been received for: DAKO 4121;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

**Dakota 3123 Intermediate Dakota I**
5 credit(s);
Credit will not be granted if credit has been received for: DAKO 4123;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

**Dakota 3125 Introduction to Dakota Linguistics**
3 credit(s);
Instructor: McKay, Neil Troy
Description: Student may contact the instructor or department for information.

**Dakota 4121 Beginning Dakota I**
3 credit(s);
Credit will not be granted if credit has been received for: DAKO 1121;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

**Dakota 4123 Intermediate Dakota I**
3 credit(s);
Credit will not be granted if credit has been received for: DAKO 3123;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

**Dakota 5126 Advanced Dakota Language I**
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: McKay, Neil Troy
Description: Student may contact the instructor or department for information.

**Dance Barbara Barker Center for Dance**

**Dnce 1001 Modern Dance Technique 1**
1 credit(s);
Instructor: STAFF
Description: This course is a basic introduction to modern dance technique. Emphasis will be placed on successful performance of the fundamental elements that comprise modern dance technique. This will include class warm-up, center floor sequences and combinations, and movement patterns that move across and through space. This course will also include basic elements of dance improvisation as well as fundamental anatomical understanding. Classes will be based on the exploration of the elements of time, space and energy while emphasizing alignment, flexibility, strength, clarity and efficiency of movement.
Style: Studio

**Dnce 1010 Modern Dance Technique 3**
1-2 credit(s), max credits 4;
Instructor: STAFF
Description: This course is the third level of eight levels of modern dance technique offered in the Dance Program. Classwork is based on practical application of the principles of space, time and energy with specific emphasis on alignment, power from the pelvic center, rotation and turnout, muscular tonality, joint articulation, clarity of intent, musicality, stretch, strength and stamina. Class consists of in-place warm-ups, specific technical exercises and dance phrases applying the technique addressed.

**Dnce 1101 Ballet Technique 1**
Dnce 1110 Ballet Technique 3
1 credit(s);
Instructor: STAFF
Description: This class is the first of the two-semester sequence of fundamental ballet technique. Classwork is based on the practical application of the principles of classical ballet technique, including body alignment and placement, strength, flexibility, coordination and musicality. By the end of the semester students should be able to understand a basic level of ballet vocabulary and be able to execute it with ease and confidence.

Dnce 1201 Jazz Technique 1
1 credit(s);
Instructor: STAFF
Description: This is the first of an eight-semester sequence of jazz dance technique/style. Class work will focus on fundamental jazz vocabulary and movement. Emphasis will be on basic understanding of proper body placement, clear articulation and basic mechanics of jazz movement, and basic rhythm patterns. Improvisation will be introduced as a tool to gain a better understanding of one's movement potential.
Style: studio

Dnce 1201 Jazz Technique 1
1 credit(s);
Instructor: Grotting,Karla Kaye
Description: Student may contact the instructor or department for information.

Dnce 1301 Tap Technique 1
1 credit(s);
Instructor: STAFF
Description: This studio class will focus on the fundamentals of tap dance with an emphasis on musicality and rhythm. Students will learn basic footwork and combinations and beginning time steps. Students will also be introduced to exercises for tap dance improvisation.
Style: Studio

Dnce 1313 African Based Movement
1 credit(s);
Instructor: STAFF
Description: This course will focus on varied movement of the African Diaspora, primarily West Africa, but not limited to the West African region or the continent of Africa. Class will include traditional movement, but will also focus on movement inspired by Africa, the Caribbean, and the African Diaspora at large. Coursework includes in-class movement participation, one movement midterm, and one two-page paper.

Dnce 1323 Swing Dance
1 credit(s);
Instructor: STAFF
Description: This course will cover the traditional swing dances popular in the United States during the 1930s and through the early 1960s. Each week new movements and figures will be taught and previous dances will be reviewed. To increase the learning process, students will be expected to change partners throughout class.
Dnce 1327 Argentine Tango
OPT No Aud, 1 credit(s);
Instructor: Taccetti, Maria Florencia
Description: Student may contact the instructor or department for information.

Dnce 1331 Yoga
1 credit(s);
Instructor: STAFF
Description: This course will give a basic introduction to the theory and practice of Yoga. The course will introduce the student to standing postures, forward bends and twists, balancing and seated postures, inversions, back bends, and guided relaxation and meditation. Course objectives include proper alignment, proper weight placement, body awareness, relaxation, and breathing techniques. Assignments will include a midterm paper and a movement demonstration final.

Dnce 1335 T'ai Chi Ch'uan
1 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Dnce 1343 Hip Hop Movement
OPT No Aud, 1 credit(s);
Instructor: Sarge, Kenna Jean
Description: Hip hop's forms: old school, popping, locking, breaking, contemporary choreography, social dances. History, culture, technique. Warm-up, strength/endurance applications, choreography, cool down. Lecture, demonstration, practice.

Dnce 1349 Contact Improvisation
1 credit(s);
Instructor: STAFF
Description: This class will provide a safe, clear introduction to the dance form Contact Improvisation. Students will learn technical skills such as the rolling point of contact, supporting and being supported, falling and recovering, connecting with the center as a source and support for movement. Classes will include a warm up designed to connect the body in order to dance with a sense of ease and power. Students will learn the fundamental principles of contact improvisation through skill work and through the experience of improving with other people.

Dnce 1351 African Diasporic Movement 1
OPT No Aud, 1 credit(s);
Instructor: Brown, Patricia
Description: Student may contact the instructor or department for information.

Dnce 1353 African Diasporic Movement 3
OPT No Aud, 1 credit(s);
Instructor: Johnson Jr, Morris
Description: Student may contact the instructor or department for information.

Dnce 1401 Introduction to Dance
OPT No Aud, 3 credit(s); Credit will not be granted if credit has been received for: CHIC 1401; Meets CLE req of Arts/Humanities
Instructor: Garcia, Cindy
Description: What is dance? Where do we engage with dance today? Can dance "do" things? How does dance create social meaning? How can we write about dance? In this course, we will ask these questions while considering dance as a framework for the analysis of moving bodies. We will develop ways of interpreting and articulating dance through reading, writing, moving, and watching dance. Throughout, we will focus on the movement politics of race, class, gender, sexuality, and nation and the transnational circulation of various dance genres. This is both a seminar and a movement course. Come prepared to read, write, move, and discuss dance. You do not need to have prior dance experience to succeed in this course.

Dnce 1601 Dance Improvisation
A-F only, 1 credit(s);
Instructor: STAFF
Description: This course is the first part of a six-semester sequence in Dance Composition. Classwork consists of exploration of individual ways of moving via the improvisational process. Students will link this exploration to the fundamental elements of dance: time, space, and energy. Students will also examine metered time, musical phrasing, movement speed, shape, and quality. Focus will be placed on using various improvisational and choreographic structures to express a movement idea. Course objectives include exploring the creative process, discovering individual movement vocabulary, and experimenting with structural devices in dance.

Dnce 1626 Music for Dance
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: This course will examine the basics of music with continual reference to music/dance interactions. While striving to hear more and more when listening to music, students will also learn copious terminology to describe what they hear. Classwork will also include honing basic rhythm skills, working with notation, playing percussion and discussion of the ways music and dance can combine.

Dnce 1905 Freshman Seminar: Shake Your Groove Thing: The Politics of Dancing
A-F only, 3 credit(s);
Instructor: Garcia, Cindy
Description: Student may contact the instructor or department for information.

Dnce 3010 Modern Dance Technique 5
2 credit(s), max credits 4;
Instructor: STAFF
Description: This course is the fifth level of eight levels of modern dance technique offered in the Dance Program. The purpose of the technique class is to allow the intermediate modern dance student to explore and discover himself/herself as an articulate and expressive mover. Classwork continues to involve space, time and energy with specific emphasis on alignment, power, momentum, articulation, clarity of intent, musicality, strength, stretch, and stamina. Class consists of in-place warm-ups, technical exercises and dance phrases applying the technique addressed. Successful completion of previous level or departmental approval by audition required for registration.
Style: Studio

Dnce 3110 Ballet Technique 5
2 credit(s), max credits 4;
Instructor: STAFF
Description: This course is the fifth level of an eight-semester sequence in classical ballet. This course offers the intermediate ballet student principles of ballet technique. Classwork will involve strong emphasis on proper alignment of the body, dynamic timings, and a command of ballet terminology. The class format will begin with barre, followed by a period of stretching. Turning and jumping will be re-introduced at the barre and subsequently transferred to the center. Centerwork will include all aspects of ballet technique including port de bras, adagio, turns, petite allegro and grade allegro. As the semester progresses, the combinations will become more complex. A constant correlation between barre and centerwork will be explored.

Dnce 3210 Jazz Technique 5
1 credit(s), max credits 2;
Instructor: STAFF
Description: This is the fifth of an eight-semester sequence of jazz dance technique/style. Classwork will concentrate on the development of a clear understanding of the eclectic range of jazz dance and its various styles. Movement vocabulary will cover styles from the American vernacular to more contemporary styles of today. In addition to the established techniques from the previous levels, focus will be placed on off-center movements, floor work and a variety of turns and jumps. Emphasis will be on individual style, working on clarity of movement, and improvisation. Successful completion of previous level or departmental approval by audition required for registration.
Style: Studio

Dnce 3301 Tap Technique 3
1 credit(s);
Instructor: STAFF
Description: This course is the third in a six-semester sequence of tap dance technique. This studio class will focus on intermediate skills of tap dance including pick-ups, pull-backs and wings. There will be a continuing emphasis on musicality and rhythm. The class will practice intermediate footwork and combinations, time steps, tap dance routines, and improvisation exercises.
Dnce 3334 Introduction to Dance/Movement Therapy
2 credit(s);
Instructor: Nordstrom-Loeb, Barbara E
Description: This course is a basic introduction to the field of Dance/Movement Therapy. It will include 1) historic and theoretical perspectives on the use of movement and dance in relationship to psychology and healing; 2) an introduction to some of the major Dance/Movement Therapy pioneers and techniques; and 3) a brief introduction to ways that Dance/Movement Therapy is used with various populations and in a variety of settings. The class is both experiential and didactic. Objectives: The student will be able to: describe the field of Dance/Movement Therapy in relationship to related disciplines such as Dance, Psychology, Creative Arts Therapies, Somatics and Complementary and Alternative Therapies; identify and discuss the basic premises, theory and approaches of Dance/Movement Therapy; be familiar with selected Dance/Movement Therapy pioneers and their contribution to the field of Dance/Movement Therapy; understand the uses of Dance/Movement Therapy with selected settings and populations; be familiar with training process and requirements for Dance Movement Therapy certification; apply Dance/Movement Therapy approaches to their own experience.

Dnce 3337 Body Mind Centering
2 credit(s);
Instructor: STAFF
Description: This class provides an overview of Body-Mind Centering, a new approach to movement, mind and body developed over the past thirty years by Bonnie Bainbridge Cohen, O.T. Classwork includes improvisational movement explorations, hands-on re-patterning work and discussion designed to give direct experience of the way mind (desire, attention, and intention) is expressed through the various body systems. These systems are the skeletal, organ, muscle, fluid, nervous, and endocrine. In addition, students will study developmental movement, the baby movements that underlie our more complex adult movement. Imagery, touch, and anatomical information will be used as tools to help students access a range of inner sensations and movement experiences. Emphasis will be on the acknowledgement of each individual's unique experience of the body, as well as on the experiences we share as human beings. This class is experiential and includes movement, touch, lecture and class discussion. Students can expect to spend two to three hours per week in outside reading and keeping a journal. There is one quiz and one take home exam.

Dnce 3351 African Diasporic Movement 5
OPT No Aud, 1 credit(s), max credits 2;
Instructor: Silva Dos Santos, Marciano
Description: Student may contact the instructor or department for information.

Dnce 3401W Dance History 1
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Dance History 1 & 2 are basic survey courses that study the development of dance with a primary focus on the West. Beginning with examining notions of 'historiography' and what it means to bring the 'dancing body' within the norms generated by textually and linguistically based disciplines such as history, Dance History 1 goes on to study the different ways that dance seems to have evolved in ancient civilizations such as Egypt, India, and Greece. The first semester of the course then works through the development of dance through church and court in Europe, with occasional perspectives from other cultures, and ends with a focus on the beginnings of ballet in the French court of Louis the XIV.

Dnce 3487W Dance and Citizenship: Land, Migration, and Diaspora
3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course is a study of dance and performance as practiced and transformed by Native Americans and minority groups in the United States, marked as the "ethnic body". Emphasis is on migration as a global phenomenon, particularly pertaining to land disputes, labor distribution, political asylum and dislocation. The course also strives to understand the nature of so-called "ethnic practices" in the context of cultural exchange and multiculturalism within United States. The course addresses how the socio-historical perspective of the dance, as practiced, developed and performed in the United States context, exercise the understanding of political identity and citizenship.

Dnce 3602 Dance Composition 2
3 credit(s);
Instructor: STAFF
Description: This course is the third part of a six-semester sequence in Dance Composition. Classwork consists of learning tools to create dances that express a personal vision, have developed integrity of form and structure and show a pronounced awareness of one's own individual movement vocabulary. Students will continue to broaden their kinespheric understanding of the nature of movement improvisation and its relationship to choreographic structure. An understanding and appreciation of the creative process and its application to one’s self and other art forms will also be discussed and implemented through assignments in movement and writing.

Dnce 3621 Dance Production I
A-F only, 2 credit(s);
Instructor: STAFF
Description: In this course students will study the technical and administrative aspects of dance production. This includes lighting, costumes, sound, marketing, stage management, fundraising and publicity. Emphasis will be placed on learning practical project management and personal management skills.

Dnce 4443 Theorizing Dancing Bodies
3 credit(s);3402W or instr consent Credit will not be granted if credit has been received for: DNCE 5443;
Instructor: STAFF
Description: Theorizing Dancing Bodies is a discourse-based course with the intention of developing a theoretical base for the newly emerging discipline of Dance Studies and within that, a strong focus on "reading" dance. Working with the premise that Dance Studies, like Performance Studies, is fundamentally different than most other artistic disciplines, in that it has dancing bodies at its center, this course works through various aesthetic and philosophical perspectives and the lens of intersecting race, gender, class, and sexuality, to arrive at a complex consciousness about the impact dancing images can have on the socio-cultural scene.
Grading: 30% reports/papers, 35% in-class presentation, 35% class participation.
Exam Format: Essay

Dnce 4602 Dance Composition 4
3 credit(s);
Instructor: STAFF
Description: This course is the fifth of a six-semester sequence in Dance Composition. Class work will consist of exploration and structuring of dances for groups. Course Objectives include: developing and understanding and appreciation for the craft of group choreography, exploring the creative process, discovering movement vocabulary, and acquiring skills of compositional structures for groups.

Dnce 4901 Senior Seminar
S-N only, 2 credit(s);Sr, [Dnce or Th major]Credit will not be granted if credit has been received for: TH 4901;
Instructor: STAFF
Description: Development of senior project, alone or in groups, under guidance of faculty members.

Dnce 5010 Modern Dance Technique 7
2 credit(s), max credits 4;
Instructor: STAFF
Description: This course is the seventh level of eight levels in modern dance technique. This course will offer a variety of modern dance techniques and styles from various instructors and guest artists. This course is intended for the advanced dance major.

Dnce 5110 Ballet Technique 7
1 credit(s), max credits 2;
Instructor: STAFF
Description: This course is the seventh in an eight-semester sequence of ballet technique. This advanced level ballet class will emphasize and further develop the following skills: clarity of arms and head positions, a strong stance, stability and balance, coordination of the joining of steps, use of feet in jumps, the ability to reverse and remember movement combinations.

Dnce 5334 Introduction to Dance/Movement Therapy
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Dnce 5443 Theorizing Dancing Bodies
3 credit(s);instr consent Credit will not be granted if credit has been received for: DNCE 4443;
Instructor: Chatterjea, Ananya
Description: Theorizing Dancing Bodies is a discourse-based course with the intention of developing a theoretical base for the newly emerging discipline of Dance Studies and within that, a strong focus on 'reading' dance. Working with the premise that Dance Studies, like Performance Studies, is fundamentally different than most other artistic disciplines, in that it has dancing bodies at its center, this course works through various aesthetic and philosophical perspectives and the lens of intersecting race, gender, class, and sexuality, to arrive at a complex consciousness about the impact dancing images can have on the socio-cultural scene.

Dnce 5500 Topics in Dance
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: See instructor descriptions per section.

Dnce 5700 Performance
1 credit(s), max credits 4, 4 completions allowed;
Instructor: STAFF
Description: This course is for students in University Dance Theatre.

Dnce 5858 Teaching Dance
4 credit(s);
Instructor: STAFF
Description: This course is an introduction to pedagogy and dance teaching methods. Students will discuss various theories of teaching, the responsibilities when teaching and the craft or art of teaching dance. The class will examine potential students by special interest groups. Time will be spent on small teaching projects dealing with one specific idea, as well as developing individual lesson plans and a series of classes. The students in the class will teach each other as well as develop classes for outside groups. The class will discuss and implement the fulfillment of the goal to coordinate the creative and the technical development of our potential students.

Dnce 5993 Directed Studies
1-4 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Dnce 5993 Directed Studies
1-4 credit(s), max credits 10, 10 completions allowed;
Instructor: Chatterjea, Ananya
Description: Student may contact the instructor or department for information.

Dental Hygiene  9-406 Malcolm Moos Health Sciences Tower

DH 2111 Dental Anatomy
A-F only, 2 credit(s);
Instructor: Anderson, Jeanne Marie
Description: All deciduous and permanent teeth, including tooth form, function, and relationship to oral health; calcification, eruption, and exfoliation patterns; ideal static occlusion, dental terminology, and tooth annotation systems. Lab includes identification and annotation of teeth and restoration, in wax, of portions of a typodont tooth. Includes content necessary for the practice of dental hygiene. Teaching methods include lecture, large and small group discussion, and laboratory assignments in drawing, carving, and annotating teeth. Textbooks: Woelfel and Scheid, "Dental Anatomy, Its Relevance to Dentistry." Williams and Wilkens Publisher; Dental Anatomy Study Guide. Course only open to students enrolled in the Program in Dental Hygiene.
Style: 40% Lecture, 10% Discussion, 50% Laboratory.
Exam Format: multiple choice

DH 2121 The Dental Hygiene Care Process Clinical Application I
A-F only, 5 credit(s);
Instructor: Osborn, Joy B
Description:

DH 2132 Head and Neck Anatomy
A-F only, 1 credit(s);
Instructor: Blue, Christine M
**DH 3224W Dental Hygiene Care Process: Clinical Application IV**
- A-F only, 6 credit(s); Meets CLE req of Writing Intensive
- Instructor: Blue, Christine M
- Description: Student may contact the instructor or department for information.

**DH 3228 Ethics and Jurisprudence for the Dental Hygienist**
- A-F only, 1 credit(s);
- Instructor: Blue, Christine M
- Description: Student may contact the instructor or department for information.

**DH 3234 Oral and Maxillofacial Radiology: Theory, Principles, and Radiographic Analysis**
- A-F only, 1 credit(s);
- Instructor: Ahmad, Mansur
- Description: The purpose of this course is to assist students in mastering fundamental concepts and principles that are essential for effective and safe utilization of X rays in accordance with good professional judgment and state and federal radiation regulations. This course also establishes a good foundation for students from which they can acquire additional knowledge and answer questions often raised by patients and others about the biological effects of X rays as used in dentistry. It consists of a systematic study of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinus; and manifestations of systemic diseases in jaws and associated structures. We will be assisting students in detecting and evaluating radiographic evidence of deviations from the normal so that they can make valid recommendations and judgments on the basis of radiographs alone or in conjunction with other procedures in arriving at a differential diagnosis, a tentative diagnosis, and the definitive or final diagnosis. Emphasis is placed on developing the ability to use concepts already learned in oral and general pathology and basic biological science courses in understanding and evaluating the nature of the disease process.

**DH 3238 Dental Public Health and Academic Service Learning**
- A-F only, 3 credit(s);
- Instructor: Flynn, Priscilla Moen
- Description: Student may contact the instructor or department for information.

**DH 4300 Elective Academic Service Learning Experiences and Externships**
- S-N only, 0-13 credit(s), max credits 13, 1 completion allowed;
- Instructor: Blue, Christine M
- Description: Student may contact the instructor or department for information.

**DH 4310 Foundations of Interprofessional, Professionalism, Communication, and Collaboration**
- S-N only, 1 credit(s), max credits 2;
- Instructor: Lopez, Naty
- Description: Student may contact the instructor or department for information.

**DH 5201 Management Internship**
- S-N only, 5 credit(s);
- Instructor: Blue, Christine M
- Description: Student may contact the instructor or department for information.

**DH 5203 Capstone Project**
- S-N only, 5 credit(s);
- Instructor: Blue, Christine M
- Description: Student may contact the instructor or department for information.

**DH 5403 The Discipline of Dental Hygiene**
- A-F only, 2 credit(s);
- Instructor: Stoltenberg, Jill L
DH 5405 Curriculum and Course Development
A-F only, 2 credit(s), max credits 4;
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.

DH 5407 Instructional Strategies for Effective Teaching
A-F only, 2 credit(s);
Instructor: Stoltenberg, Jill L
Description: Student may contact the instructor or department for information.

DH 7777 Thesis
S-N only, 10 credit(s);
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.

**Dental Therapy**

DT 3210 Head and Neck Anatomy
A-F only, 1 credit(s);
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.

DT 3231 Oral and Maxillofacial Radiology II
A-F only, 1 credit(s);
Instructor: Ahmad, Mansur
Description: The purpose of this course is to assist students in mastering fundamental concepts and principles that are essential for effective and safe utilization of X rays in accordance with good professional judgment and state and federal radiation regulations. This course also establishes a good foundation for students from which they can acquire additional knowledge and answer questions often raised by patients and others about the biological effects of X rays as used in dentistry. It consists of a systematic study of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinus; and manifestations of systemic diseases in jaws and associated structures. We will be assisting students in detecting and evaluating radiographic evidence of deviations from the normal so that they can make valid recommendations and judgments on the basis of radiographs alone or in conjunction with other procedures in arriving at a differential diagnosis, a tentative diagnosis, and the definitive or final diagnosis. Emphasis is placed on developing the ability to use concepts already learned in oral and general pathology and basic biological science courses in understanding and evaluating the nature of the disease process.

DT 3330 Clinical Application I
A-F only, 3 credit(s);
Instructor: Osborn, Joy B
Description: Student may contact the instructor or department for information.

DT 3333 Dental Public Health and Academic Service Learning I
A-F only, 3 credit(s);
Instructor: Flynn, Priscilla Moen
Description: Student may contact the instructor or department for information.

DT 3334W Dental Therapy Care Process: Clinical Application II
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.

DT 3336 Ethics and Jurisprudence for the Dental Therapist
A-F only, 1 credit(s);
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.
DT 3410 Applied Dental Biomaterials
  A-F only, 1 credit(s);
  Instructor: Combe, Edward Charles
  Description: Student may contact the instructor or department for information.

DT 3429 Introduction to Psychomotor Skill Development
  S-N only, 1 credit(s);
  Instructor: Phair, Craig B
  Description: Student may contact the instructor or department for information.

DT 3430 Oral Anatomy
  A-F only, 2 credit(s);
  Instructor: Madden, Michael John
  Description: Student may contact the instructor or department for information.

DT 3431 Oral Anatomy Laboratory
  A-F only, 3 credit(s);
  Instructor: Madden, Michael John
  Description: Student may contact the instructor or department for information.

DT 3434 Operative Dentistry II for the Dental Therapist, Lecture
  A-F only, 1 credit(s);
  Instructor: Phair, Craig B
  Description: Student may contact the instructor or department for information.

DT 3471 Prosthodontic Topics for Dental Therapy
  S-N only, 2 credit(s);
  Instructor: Self, Karl D
  Description: Student may contact the instructor or department for information.

DT 3521 Foundations of Interprofessional Professionalism, Communication and Collaboration
  S-N only, 1 credit(s);
  Instructor: Lopez, Naty
  Description: Student may contact the instructor or department for information.

DT 4140 Preventive Pediatric Dentistry Clinic
  A-F only, 1 credit(s);
  Instructor: Yesil, Jasmine
  Description: Student may contact the instructor or department for information.

DT 4141 Clinical Pediatric Dentistry III
  A-F only, 2 credit(s), max credits 6, 3 completions allowed;
  Instructor: Yesil, Jasmine
  Description: Student may contact the instructor or department for information.

DT 4241 Oral Radiology Clinic II
  A-F only, 1 credit(s);
  Instructor: Ahmad, Mansur
  Description: Student may contact the instructor or department for information.

DT 4320 Comprehensive Care Clinic
  S-N only, 4 credit(s);
  Instructor: Nadeau, Richard D
  Description: Student may contact the instructor or department for information.

DT 4361 Outreach Experiences II
  S-N only, 2 credit(s);
  Instructor: Schulz DDS, Paul D
**DT 4443 Operative Clinic III**  
A-F only, 4 credit(s);  
Instructor: Hildebrandt, Gary Howard  
Description: Student may contact the instructor or department for information.

**DT 5140 Preventive Pediatric Dental Clinic**  
A-F only, 1 credit(s);  
Instructor: Yesil, Jasmine  
Description: Student may contact the instructor or department for information.

**DT 5141 Clinical Pediatric Dentistry III**  
A-F only, 2 credit(s);  
Instructor: Yesil, Jasmine  
Description: Student may contact the instructor or department for information.

**DT 5210 Head and Neck Anatomy**  
A-F only, 1 credit(s);  
Instructor: Eliason, Sandra Jean  
Description: This course will cover the anatomical structures of the head and neck as they relate to dental therapy treatment.  
Style: 85% Lecture, 5% Film/Video, 10% Discussion.

**DT 5210 Head and Neck Anatomy**  
A-F only, 1 credit(s);  
Instructor: Blue, Christine M  
Description: This course will cover the anatomical structures of the head and neck as they relate to dental therapy treatment.  
Style: 85% Lecture, 5% Film/Video, 10% Discussion.

**DT 5231 Oral and Maxillofacial Radiology II**  
A-F only, 1 credit(s);  
Instructor: Ahmad, Mansur  
Description: The purpose of this course is to assist students in mastering fundamental concepts and principles that are essential for effective and safe utilization of X rays in accordance with good professional judgment and state and federal radiation regulations. This course also establishes a good foundation for students from which they can acquire additional knowledge and answer questions often raised by patients and others about the biological effects of X rays as used in dentistry. It consists of a systematic study of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinus; and manifestations of systemic diseases in jaws and associated structures. We will be assisting students in detecting and evaluating radiographic evidence of deviations from the normal so that they can make valid recommendations and judgments on the basis of radiographs alone or in conjunction with other procedures in arriving at a differential diagnosis, a tentative diagnosis, and the definitive or final diagnosis. Emphasis is placed on developing the ability to use concepts already learned in oral and general pathology and basic biological science courses in understanding and evaluating the nature of the disease process.

**DT 5241 Oral Radiology Clinic II**  
A-F only, 1 credit(s);  
Instructor: Ahmad, Mansur  
Description: Student may contact the instructor or department for information.

**DT 5320 Comprehensive Care Clinic**  
S-N only, 4 credit(s);  
Instructor: Nadeau, Richard D  
Description: Student may contact the instructor or department for information.

**DT 5330 Clinical Application I**  
A-F only, 3 credit(s);  
Instructor: Osborn, Joy B  
Description: This course will cover the dental therapy care process, assessment principles related to medical and oral health status, dental therapy clinical procedures and development of instrumentation skills.
DT 5333 Dental Public Health and Academic Service Learning I  
A-F only, 3 credit(s);  
Instructor: Flynn, Priscilla Moen  
Description: Student may contact the instructor or department for information.

DT 5334W Dental Therapy Care Process: Clinical Application II  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Blue, Christine M  
Description: Student may contact the instructor or department for information.

DT 5336 Ethics and Jurisprudence for the Dental Therapist  
A-F only, 1 credit(s);  
Instructor: Blue, Christine M  
Description: Student may contact the instructor or department for information.

DT 5361 Outreach Experiences II  
S-N only, 2 credit(s);  
Instructor: Schulz DDS, Paul D  
Description: Student may contact the instructor or department for information.

DT 5410 Applied Dental Biomaterials  
A-F only, 1 credit(s);  
Instructor: Combe, Edward Charles  
Description: Student may contact the instructor or department for information.

DT 5429 Introduction to Psychomotor Skill Development  
S-N only, 1 credit(s);  
Instructor: Phair, Craig B  
Description: Student may contact the instructor or department for information.

DT 5430 Oral Anatomy  
A-F only, 2 credit(s);  
Instructor: Madden, Michael John  
Description: Student may contact the instructor or department for information.

DT 5431 Oral Anatomy Laboratory  
A-F only, 3 credit(s);  
Instructor: Madden, Michael John  
Description: Student may contact the instructor or department for information.

DT 5434 Operative Dentistry II Lecture  
A-F only, 1 credit(s);  
Instructor: Phair, Craig B  
Description: Student may contact the instructor or department for information.

DT 5443 Operative Clinic III  
A-F only, 4 credit(s);  
Instructor: Hildebrandt, Gary Howard  
Description: Student may contact the instructor or department for information.

DT 5460 Essentials of Clinical Care I For the Dental Therapist  
S-N only, 1-12 credit(s), max credits 12, 1 completion allowed;  
Instructor: Riggs, Sheila  
Description: Student may contact the instructor or department for information.

DT 5471 Prosthodontic Topics for Dental Therapy  
S-N only, 2 credit(s);
Instructor: Self, Karl D  
Description: Student may contact the instructor or department for information.

DT 5521 Foundations of Interprofessional Professionalism, Communication, and Collaboration  
S-N only, 1 credit(s);  
Instructor: Lopez, Naty  
Description: Student may contact the instructor or department for information.

**Dentistry 15-209 Malcolm Moos Health Sciences Tower**

Dent 6470 Health Ecology Elective  
1-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Born, David Omar  
Description: Student may contact the instructor or department for information.

Dent 6480 Advanced General Dentistry Elective  
1-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Born, David Omar  
Description: Student may contact the instructor or department for information.

Dent 6490 Health Ecology: Independent Study  
1-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Born, David Omar  
Description: Student may contact the instructor or department for information.

Dent 6715 Advanced Endodontic Elective  
S-N only, 0 credit(s);  
Instructor: Baisden, Michael Kenneth  
Description: Student may contact the instructor or department for information.

Dent 7021 Contemporary Diagnosis and Management of Orofacial Pain  
A-F only, 1 credit(s);  
Instructor: Morrow, Leesa  
Description: Student may contact the instructor or department for information.

Dent 7032 Field Experience: Administration in a Multidisciplinary Health Center  
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Shuman, Stephen K  
Description: Student may contact the instructor or department for information.

Dent 7051 Advanced Study in the Theory and Principles of Oral Medicine  
A-F only, 2 credit(s);  
Instructor: Rhodus, Nelson L  
Description: Student may contact the instructor or department for information.

Dent 7061 Special Oral Pathology I  
A-F only, 0 credit(s);  
Instructor: Rohrer, Michael D  
Description: Student may contact the instructor or department for information.

Dent 7071 General Practice Residency Dental Clinic  
S-N only, 13 credit(s), max credits 52, 4 completions allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

Dent 7102 Conscious Sedation  
A-F only, 2 credit(s);
Instructor: Hinrichs DDS, MS, James Edward
Description: Student may contact the instructor or department for information.

Dent 7111 Current Literature Review in Dentistry
S-N only, 2 credit(s);
Instructor: Conrad, Heather Joan
Description: Student may contact the instructor or department for information.

Dent 7112 Treatment Planning Seminar
A-F only, 2 credit(s), max credits 4;
Instructor: Conrad, Heather Joan
Description: Student may contact the instructor or department for information.

Dent 7121 Psychological Issues in Medical and Dental Patient Management
1 credit(s);
Instructor: Morrow, Leesa
Description: Student may contact the instructor or department for information.

Dent 7991 Independent Study
OPT No Aud, 1-4 credit(s), max credits 8;
Instructor: Shuman, Stephen K
Description: Student may contact the instructor or department for information.

Dent 8090 Evidence-based Clinical Pediatric Dentistry
A-F only, 2 credit(s);
Instructor: Karp, Jeffrey Michael
Description: Student may contact the instructor or department for information.

Dent 8100 Topics in Advanced Periodontology: Literature Review
2 credit(s);
Instructor: Johnson, Deborah Kay
Description: Student may contact the instructor or department for information.

Dent 8120 Advanced Principles and Techniques of TMJ and Orofacial Pain Disorders
A-F only, 3 credit(s);
Instructor: Schiffman, Eric L
Description: Student may contact the instructor or department for information.

Dent 8121 Current Literature in TMJ and Craniofacial Pain
A-F only, 1 credit(s);
Instructor: John, Mike Torsten
Description: Student may contact the instructor or department for information.

Design 240 McNeal Hall

Des 1101V Honors: Introduction to Design Thinking
A-F only, 4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Hemmis, Patricia
Description: Course Description: Students in DES 1101v (honors) will explore, through lecture and hands-on projects, the many ways that design thinking has become a powerful force in the 21st century. On the one hand, design methods and processes are seen as an important means of tackling complex social and cultural problems. On the other hand, designers stimulate desire and need through their manipulation of the form and function of places and objects. Designers are asked to re-think and re-shape processes as well as products. Design production has expanded to include the design of interactions, communications services, and collaborations. Design thinking is a crucial means of fostering creativity and innovation when employed as a problem-solving tool in such fields as business or medical practice. More than ever, designers are called upon to place human needs at the center of their design engagement. As a result, design thinking has become a powerful tool to address issues such as sustainability and social justice, at both a macro and micro level. Audience: This course is intended for undergraduate students who are interested in learning how design thinking and design processes can be used as a catalyst for exploration, innovation and research. Rationale: This course exposes students to many
facets of design thinking and provides them with an interdisciplinary perspective about design and human behavior. DES 1101w offers the opportunity to raise awareness about the value and the power of design thinking in our culture. Readings, Notes and Handouts: All course materials will be posted to the DES 1101w course website.

**Style:** 25% Lecture, 15% Film/Video, 25% Discussion, 25% Student Presentation, 10% Guest Speakers. Students complete and present to hands-on group projects on design topics. Students work on projects in class, although outside time is also necessary.

**Grading:** 40% reports/papers, 25% special projects, 30% quizzes, 5% reflection paper.

**Exam Format:** Exams include short answer, fill in the blank and essay. Students are expected to apply class concepts in written assignments and on exams.

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### Des 1101W Introduction to Design Thinking

**A-F only, 4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive**

**Instructor:** Hemmis, Patricia

**Description:** Course Description: Students in DES 1101w will explore, through lecture and hands-on projects, the many ways that design thinking has become a powerful force in the 21st century. On the one hand, design methods and processes are seen as an important means of tackling complex social and cultural problems. On the other hand, designers stimulate desire and need through their manipulation of the form and function of places and objects. Designers are asked to re-think and re-shape processes as well as products. Design production has expanded to include the design of interactions, communications services, and collaborations. Design thinking is a crucial means of fostering creativity and innovation when employed as a problem-solving tool in such fields as business or medical practice. More than ever, designers are called upon to place human needs at the center of their design engagement. As a result, design thinking has become a powerful tool to address issues such as sustainability and social justice, at both a macro and micro level. Audience: This course is intended for undergraduate students who are interested in learning how design thinking and design processes can be used as a catalyst for exploration, innovation and research. Rationale: This course exposes students to many facets of design thinking and provides them with an interdisciplinary perspective about design and human behavior. DES 1101w offers the opportunity to raise awareness about the value and the power of design thinking in our culture. Readings, Notes and Handouts: All course materials will be posted to the DES 1101w course website.

**Style:** 50% Lecture, 15% Film/Video, 25% Small Group Activities, 10% Guest Speakers. Students complete and present two hands-on group projects on design topics. Students work on projects in recitation periods, although outside time is also necessary.

**Grading:** 30% reports/papers, 30% special projects, 35% quizzes, 5% reflection paper.

**Exam Format:** Exams are composed of short answer, essay, and fill in the blank. Exams require students to identify and apply course concepts

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### Des 1111 Creative Problem Solving

**A-F only, 3 credit(s);**

**Instructor:** Hokanson, Brad

**Description:** How we generate new ideas is a critical skill in any field. It is a skill that can be employed on a small project or on a large project, but it must be developed and practiced. All of us can improve our capability for creative output and innovation. This course presents classic and new techniques through student activities, research, papers, projects, and exams. The use and mastery of creativity is the goal for this class and this semester. Assignments, lectures, discussions, and projects all will focus on this development of creative skills. This is the course that is the center of student activities at the University; it is the one course that deals most directly with creativity and creation. It is not directly about artistic creation; creativity is needed in all fields including business, engineering, medicine, and sociology. The nature of a student's university experience, particularly as a first year student, is a unique and different cognitive experience. Students must learn to think logically, utilize their critical thinking skills, explore ideas and to combine, integrate, and re-invent the way they think. No longer is a paper limited to a reiteration of the same information. Independent thought is now required of the successful student and professional; new ideas must be developed. Too often our educational system insists on the development of one single answer. At the University, we select our students on the basis of their ability to play by the rules of high school and standardized tests. Students, however, need the ability to go beyond linear, expected thinking and to be creative. Creativity is a skill that can be taught. It requires extensive work by the learners, but the lessons, while not conveying traditional content, will advance the learner in many ways. The principal activity of the course is the completion of a series of "differents". Starting from your own level of creativity, these exercises will challenge you to push your own limits.

**Exam Format:**

- 40% reports/papers, 25% special projects, 30% quizzes, 5% reflection paper.

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### Des 1111H Honors: Creative Problem Solving

**A-F only, 3 credit(s);**

**Instructor:** Hokanson, Brad

**Description:** Students in DES 1101w will explore, through lecture and hands-on projects, the many ways that design thinking has become a powerful force in the 21st century. On the one hand, design methods and processes are seen as an important means of tackling complex social and cultural problems. On the other hand, designers stimulate desire and need through their manipulation of the form and function of places and objects. Designers are asked to re-think and re-shape processes as well as products. Design production has expanded to include the design of interactions, communications services, and collaborations. Design thinking is a crucial means of fostering creativity and innovation when employed as a problem-solving tool in such fields as business or medical practice. More than ever, designers are called upon to place human needs at the center of their design engagement. As a result, design thinking has become a powerful tool to address issues such as sustainability and social justice, at both a macro and micro level. Audience: This course is intended for undergraduate students who are interested in learning how design thinking and design processes can be used as a catalyst for exploration, innovation and research. Rationale: This course exposes students to many facets of design thinking and provides them with an interdisciplinary perspective about design and human behavior. DES 1101w offers the opportunity to raise awareness about the value and the power of design thinking in our culture. Readings, Notes and Handouts: All course materials will be posted to the DES 1101w course website.

**Style:** 50% Lecture, 15% Film/Video, 25% Small Group Activities, 10% Guest Speakers. Students complete and present two hands-on group projects on design topics. Students work on projects in recitation periods, although outside time is also necessary.

**Grading:** 30% reports/papers, 30% special projects, 35% quizzes, 5% reflection paper.

**Exam Format:** Exams are composed of short answer, essay, and fill in the blank. Exams require students to identify and apply course concepts
**Des 1905 Freshman Seminar: Building Vision**

A-F only, 3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Fogg, Monica  
**Description:** The desire to succeed and do well can sometimes circumvent one’s willingness to embrace challenges in order to achieve an outcome (not fail). This freshman seminar aims to break down barriers and fears while developing processes toward new ways of seeing. It builds and expands connections to a larger world of ideas and disciplines. Through weekly exercises in visual storytelling, participants will sharpen their ability to see (the real world as well as the imagined). Projects are constructed to challenge perceived personal limitations in ideation and process and to build a way of communicating in a visual manner.

**Style:** 30% Lecture, 5% Film/Video, 30% Discussion, 30% Small Group Activities, 5% Guest Speakers.

**Grading:** 10% mid exam, 60% special projects, 10% attendance, 20% reflection paper.

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**Des 1905 Freshman Seminar: What I Need to Know When I Leave College**

A-F only, 3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Strong, Richard B.  
**Description:** This course will appeal to students who are curious about how imminent world changes might affect their aspirations when they leave college. There are economic, social, and environmental transformations underway that are deeply influenced by the physical limitations of our planet. This course will appeal to students who ask the question: How can I be assured that I will have a life of abundance on a finite planet? We will explore the question of How do young students fulfill their aspirations in a world where resources are limited and there will be soon more than 9 billion people? ?Albert Einstein?

**Grading:** 40% reflection paper, 20% mid exam, 10% mid-term, 30% final exam (Long Paper).

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**Des 1910W Freshman Seminar: Printing for Designers**

A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive  
Instructor: Boyd Brent, James W  
**Description:** Printing for Designers is a studio and research exploration of how designers reproduce their ideas in print. The studio component of the course will center on hands-on screenprinting in the Surface Design Studio in McNeal Hall, and will include...
monoprinting, letterpress printing, relief printing, and digital printing, as well as 3-D printing. A variety of printing surfaces will be used, including paper and fabric. The research component of the class will focus on how contemporary printing technologies are changing, and the effect these changes are having on creative production in the design world, and will also include a brief overview of the history of printing.

Des 2101 Design and Visual Presentation
A-F only, 3 credit(s);
Instructor: Fogg, Monica
Description: Two basic intentions: 1 - increase design acuity (awareness of design principles in concept and action); 2 - develop design craft with basic skills in Adobe Creative Suite and Microsoft PowerPoint. Spring 2012, the course will be 75-80% online, with 15 or so days when physical attendance is required. There will be one 1-hour assisted lab session (optional) per week. This course introduces basic design practices used in presentation. Students will design and create projects that develop design skills useful in today's society. They will engage in the evaluation, discussion and activity of visual problem solving. Participants will gain skill in conceptual thinking and problem-solving while learning common computer and manual applications. Students will practice use of images, type, color, form, sequencing and layout. Course is oriented toward the beginner. There will be written exam/s on the readings and lectures.
Style: It is expected that, between online learning (lectures, discussions), project development and occasional classroom presence, students will work approximately 8-9 hours per week.

Des 3131 User Experience in Design
A-F only, 3 credit(s);
Instructor: Wang, Angela
Description: The experiential components (emotional quality, affect, and lingering impression) of a design form the core of what is commonly referred to as the "user experience." In order to design for an optimal user experience, designers must first understand the guiding principles and process of interaction design. In addition, they must be competent in prototyping, conducting evaluations, and presenting their findings. This class will address the UX design process and these tools in the contexts of designed objects, interfaces, and environments. Students will apply what they learn to existing designs, conceive and propose prototype redesigns, and evaluate the effectiveness of their prototypes in a variety of design case studies.
Style: 20% Lecture, 25% Discussion, 35% Small Group Activities, 20% Guest Speakers. Small group work includes presentation and critique of projects
Grading: 50% special projects, 20% in-class presentation, 10% class participation. 20% in-class activities

Des 3201 Career and Internship Preparation for Design
A-F only, 1 credit(s);
Instructor: Perman, Heidi J
Description: This class is ideal for undergraduate students in Design majors or minors who are confident they are in the right major and want to begin seeking jobs and internships related to their career goals. Career and Internship Preparation for Design will walk you through the internship or job search process step by step to help you feel more confident in your ability to secure positions in your industry area. Through in-class presentations and activities, you will identify your top skills/strengths and learn how to market these qualities through cover letters, resumes, portfolios and job interviews. Additionally, you will learn the best resources and strategies for finding job openings in your field. Students will also have several opportunities to get advice and insight from industry professionals. Note: If you are still uncertain about your career plans or questioning your major, DES 1202, Discovering Majors and Careers, may be a more appropriate course.
Style: 30% Lecture, 20% Discussion, 30% Small Group Activities, 20% Guest Speakers. In class activities include both individual reflection activities and small group discussions.
Grading: 46% reports/papers, 46% special projects, 8% class participation.

Des 3201 Career and Internship Preparation for Design
A-F only, 1 credit(s);
Instructor: Reile, Lucy
Description: This class is ideal for undergraduate students in Design majors or minors who are confident they are in the right major and want to begin seeking jobs and internships related to their career goals. Career and Internship Preparation for Design will walk you through the internship or job search process step by step to help you feel more confident in your ability to secure positions in your industry area. Through in-class presentations and activities, you will identify your top skills/strengths and learn how to market these qualities through cover letters, resumes, portfolios and job interviews. Additionally, you will learn the best resources and strategies for finding job openings in your field. Students will also have several opportunities to get advice and insight from industry professionals. Note: If you are still uncertain about your career plans or questioning your major, DES 1202, Discovering Majors and Careers, may be a more appropriate course.
Style: 30% Lecture, 30% Discussion, 20% Small Group Activities, 20% Guest Speakers.
Des 3309 Storytelling and Design  
A-F only, 3 credit(s);  
Instructor: Peters, Stephen Michael  
Description: The course addresses the principles of storytelling as they impact presentation skills. Story elements, selection, and delivery will be practiced in oral and non-verbal forms and understood as they apply to disciplines within and beyond academics. The majority of work in the course directly deals with two communication methods, speaking and writing. The course itself focuses on and builds out from the tradition of oral storytelling, aiming toward telling stories designed to enliven professional presentations and, in one assignment, fashioning micro-stories for job interviews. Students will develop and present six stories; each is evaluated and critiqued by the instructor and the storyteller’s peers for structure, clarity, pacing, and interaction with the audience. In addition, each class session has a reading component and, in most cases, a written response to the reading or a recording of their stories in written form is assigned. Selected presentations by the students are video recorded and are reviewed with individual students in individual meetings. A rubric for evaluating their performance is used and is included with the syllabus.  
Style: 5% Lecture, 25% Discussion, 15% Small Group Activities, 50% Student Presentation, 5% Demonstration.  
Grading: 15% reports/papers, 15% reflection paper, 60% in-class presentation, 10% class participation.

Des 3311 Travels in Typography  
A-F only, 3 credit(s);  
Instructor: Moran, Bill  
Description: Travels in Typography: A hands-on survey. From Gutenberg to Gill, from papyrus to paper, immerse yourself in the tactile qualities of the printed word. This class will map the development of writing and its offspring, movable type, using the exceptional resources of the internationally-renowned James Ford Bell Library at the University of Minnesota. Throughout the semester students will use the Bell Library’s rare book and map collection to undertake hands-on design exercises that take them on a historical and practical tour of all the major developments in typography, including stoncutting, calligraphy and letterpress printing.

Des 3321 Introduction to Furniture Design  
A-F only, 3 credit(s);  
Instructor: Oliphant, Thomas Arthur  
Description: Furniture moderates our environment as an expression varying needs?the experience of need is individual, but the expression is cultural. This seminar collectively explores furniture design and the designs of furniture. Participation and the free exchange of ideas are vital. All individual and group work will be documented in PDF format for bundling and distribution to all. Field trips and guests are scheduled. This course develops reflective, analytical and persuasive skills. Assigned work includes: three (3) illustrated essays; two (2) small-group investigations; two (2) long, individual projects ?the making and presenting a full scale & structural concept-prototype, and, a case-study/research paper. This course develops insight and knowledge of the following topics: Design Criteria: structural and intrinsic integrity ergonomics and the end-user solution history and culture Technology & Craft: workmanship material & structure quality-cost-schedule ratio markets & distribution A Non-Doctrinaire Appreciation of the... Decorative Conceptual Designed Crafted Found & Ad Hoc Engineered

Des 3331 Street Life Urban Design Seminar  
A-F only, 3 credit(s);  
Instructor: Christensen, Carrie Ann  
Description: The street is our civic common ground. To study the street is to assign a value to this most public of urban spaces. Through exploration, interrogation and reflection students will take steps in tending to the physical, social and cultural life of the street. Students will also have the chance to reflect on and engage with local streets through public history, public art, and public participation processes.  
Style: 20% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Field Trips, 10% Guest Speakers, 10% Service Learning.  
Grading: 20% reports/papers, 60% special projects, 5% attendance, 10% reflection paper, 5% in-class presentation.

Des 3341 (un)Wrapping It Up: New Materials for Design, Design for New Materials  
A-F only, 3 credit(s);  
Instructor: Wright, Bruce N  
Description: Are you interested in Architecture and product design? Do you feel restricted by wood, stone and plastic? Learn how new materials influence your work! In this seminar, we will explore the nature of new high-tech materials that have been revolutionizing many design arenas, from architecture to clothing, from products to landscapes and in between. A highly popular recent Cooper-Hewitt National Design Museum exhibition, "Extreme Textiles: Designing for High Performance," brought international attention to this exciting field of material development, as examples of specialty textiles carried scientific instruments to the surface of Mars, helped bring first responders safely back from volatile environments, and one billion people watched soccer teams compete for the World Cup in fabric-
Des 4301 Design Minor Seminar
A-F only, 3 credit(s);
Instructor: Hemmis, Patricia
Description: In this course, we will examine the powerful role of metaphors and related tropes when conceptualizing meanings within the designed environment. We will explore Lakoff and Johnson's notion that "our ordinary conceptual system is metaphorical in nature, and that as a result, metaphors affect the ways we perceive, think and act." We will use these ideas to raise questions about the role of tropes in the designed environment. Through discussion and assignments, students will analyze fundamental metaphorical conceptualizations in addition to identifying and analyzing newly emerging metaphors. We will examine the current role of metaphor in the design process and explore the possibility of an expanded usefulness.

Des 5168 Evidence-Based Design
A-F only, 3 credit(s);
Instructor: Martin, Caren Samter
Description: Students will explore the meaning of evidence-based design (EBD) as it is currently understood, as well as the adoption of EBD by design practitioners across different disciplines, such as interior design, architecture, housing studies, landscape architecture, graphic design, and apparel design. The origins of EBD and its possible benefits and/or detractors will be examined. Students will also learn the various components of EBD as a process and will explore methods of integrating this process via application to a design project in their area of expertise. Specific process, impact, influences, and anticipated outcomes of this application will be documented and analyzed as compared to a typical design process approach. Students will be prepared to begin using an EBD approach in practice as an outcome of this course.
Style: 30% Lecture, 40% Discussion, 20% Student Presentation, 10% Guest Speakers. Synthesis of readings form basis of discussion; augmented by lecture

Des 8102 Quantitative Research Methods
A-F only, 3 credit(s);
Instructor: Yust, Becky L
Description: Student may contact the instructor or department for information.

Des 8113 Teaching and Assessment
A-F only, 2 credit(s);
Instructor: Zollinger, Stephanie Watson
Description: Student may contact the instructor or department for information.

Des 8114 Design Studio
A-F only, 4 credit(s);
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

Des 8115 Grant Writing
A-F only, 2 credit(s);
Instructor: Bruin, Marilyn J
Description: Student may contact the instructor or department for information.

Des 8166 Material Culture and Design
A-F only, 3 credit(s);
Instructor: DeLong, Marilyn R
Description: Student may contact the instructor or department for information.

Development Studies and Social Change 537 Heller Hall

DSSC 8111 Approaches to Knowledge and Truth: Ways of Knowing in Development Studies and Social Change
S-N only, 2 credit(s);
Instructor: Baker, Lawrence Alan
Description: Student may contact the instructor or department for information.

DSSC 8211 Doctoral Research Workshop in Development Studies and Social Change
   S-N only, 2 credit(s);
   Instructor: Brown, Karen
   Description: Student may contact the instructor or department for information.

DSSC 8310 Topics in Development Studies and Social Change
   S-N only, 1 credit(s), max credits 3, 3 completions allowed;
   Instructor: Aminzade, Ron R
   Description: Student may contact the instructor or department for information.

DSSC 8310 Topics in Development Studies and Social Change
   S-N only, 1 credit(s), max credits 3, 3 completions allowed;
   Instructor: Gidwani, Vinay Krishin
   Description: Student may contact the instructor or department for information.

Doctor of Dental Surgery  
15-209 Malcolm Moos Health Sciences Tower

DDS 6112 Periodontology II: Technique
   A-F only, 2 credit(s);
   Instructor: Danielson, Judy Ann
   Description: Periodontology Technique is designed to introduce second year dental students to the fundamentals of periodontal instrumentation and techniques. This course utilizes periodontal curriculum content introduced in Periodontology I (Dent 5611) during Summer Semester 2008. Periodontology Technique curriculum will provide practical lab and clinical experiences to allow the student to attain beginner skills in evaluation, prevention, and treatment of gingival and periodontal disease.

DDS 6112 Periodontology II: Technique
   A-F only, 2 credit(s);
   Instructor: Sundt, Barbara Anne
   Description: Periodontology Technique is designed to introduce second year dental students to the fundamentals of periodontal instrumentation and techniques. This course utilizes periodontal curriculum content introduced in Periodontology I (Dent 5611) during Summer Semester 2008. Periodontology Technique curriculum will provide practical lab and clinical experiences to allow the student to attain beginner skills in evaluation, prevention, and treatment of gingival and periodontal disease.

DDS 6141 Pediatric Dentistry Clinic
   A-F only, 3.6 credit(s);
   Instructor: Yesil, Jasmine
   Description: Student may contact the instructor or department for information.

DDS 6152 Oral and Maxillofacial Surgery I
   A-F only, 1.1 credit(s);
   Instructor: Hughes, Pamela Jean
   Description: This course is an introductory level didactic presentation of the fundamental concepts of oral and maxillofacial surgery. Emphasis is placed on the fundamental skills of oral surgery which apply to the practice of general dentistry.

DDS 6171 Orthodontics I
   A-F only, 2.7 credit(s);
   Instructor: De Felippie, Nanci Lara
   Description: Supervision, guidance, and correction of growing or mature dentofacial structures. Growth/development of craniofacial structures. Diagnostic methods, biology of tooth movement and biomechanics. Clinical diagnosis, treatment planning

DDS 6181 Orthodontic Clinic Rotation
   S-N only, 0.2 credit(s);
   Instructor: Johnson, Wendy M
   Description: Student may contact the instructor or department for information.
DDS 6181 Orthodontic Clinic Rotation
   S-N only, 0.2 credit(s);
   Instructor: De Felippe, Nanci Lara
   Description: Student may contact the instructor or department for information.

DDS 6213 Microbiology for Dental Students
   A-F only, 4 credit(s);
   Instructor: Jardine, Paul James
   Description: Student may contact the instructor or department for information.

DDS 6214 General Histology
   A-F only, 4 credit(s);
   Instructor: Buchanan, Judith A
   Description: The purpose of this course is for students to learn the structure and basic function of cells, tissues, organs and organ systems. The course begins with description and discussion of cells that comprise the basic tissues. The unique arrangement of basic tissues to form organs and organs systems is then discussed. The course ends with discussion of general concepts of human embryologic development and embryologic development of head and neck structures. The intent is for students to have a clear mental image of the human body at the microscopic level at the successful completion of the course. Students are expected to be competent to describe and identify the structural microscopic features and functions of cells, tissues, organs and organ systems. The information and concepts students learn in general histology will be used to facilitate learning in other biomedical science courses, such as biochemistry, physiology, gross anatomy, oral histology, pathology, microbiology, pharmacology and oral pathology.

DDS 6234 Radiographic Interpretation
   A-F only, 2 credit(s);
   Instructor: Ahmad, Mansur
   Description: The purpose of this course is to assist students in mastering fundamental concepts and principles that are essential for effective and safe utilization of X rays in accordance with good professional judgment and state and federal radiation regulations. This course also establishes a good foundation for students from which they can acquire additional knowledge and answer questions often raised by patients and others about the biological effects of X rays as used in dentistry. It consists of a systematic study of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinus; and manifestations of systemic diseases in jaws and associated structures. We will be assisting students in detecting and evaluating radiographic evidence of deviations from the normal so that they can make valid recommendations and judgments on the basis of radiographs alone or in conjunction with other procedures in arriving at a differential diagnosis, a tentative diagnosis, and the definitive or final diagnosis. Emphasis is placed on developing the ability to use concepts already learned in oral and general pathology and basic biological science courses in understanding and evaluating the nature of the disease process.

DDS 6253 General & Systematic Pathology
   A-F only, 5 credit(s);
   Instructor: Krafts MD, Kristine Pauline
   Description: Student may contact the instructor or department for information.

DDS 6271 TMD & Orofacial Pain
   A-F only, 0.8 credit(s);
   Instructor: Nixdorf, Donald R
   Description: Student may contact the instructor or department for information.

DDS 6331 Introduction to Community Oral Health
   A-F only, 1.9 credit(s);
   Instructor: Born, David Omar
   Description: The course presents the dentist as engaged with multiple communities, as a professionally responsible and ethical individual. Students emerge from the course understanding the public health approach to disease and the tools used to address the public's oral health needs. In addition, students will have an understanding of the ways in which oral health care is delivered in the U.S. and of the factors impacting the supply and demand for dental services. The course director encourages students to develop analytical skills and to think critically about the delivery of dental care.

DDS 6337 Current Legal Issues for the New Dentist
   S-N only, 2.1 credit(s);
   Instructor: Ryan, Mary-Lynn L
   Description: Student may contact the instructor or department for information.
DDS 6362 Outreach Experiences II  
S-N only, 2 credit(s);  
Instructor: Schulz DDS, Paul D  
Description: Student may contact the instructor or department for information.

DDS 6411 Applied Dental Biomaterials  
A-F only, 2 credit(s);  
Instructor: Combe, Edward Charles  
Description: Student may contact the instructor or department for information.

DDS 6431 Oral Anatomy I  
A-F only, 2 credit(s);  
Instructor: Madden, Michael John  
Description: This course in oral anatomy is part of the pre-clinical curriculum and is designed to introduce the basic morphological characteristics of the human dentition and associate contiguous structures. The format includes lectures and laboratory. The laboratory is designed to assist in the development of your manual dexterity skills and at the same time facilitate the learning of dental anatomy of the human dentition. The aim of this course is to provide foundational knowledge that could be applied to most, if not all situations they may encounter in general clinical practice.

DDS 6432 Oral Anatomy Laboratory I  
A-F only, 2.9 credit(s);  
Instructor: Madden, Michael John  

DDS 6433 Introduction to Psychomotor Skill Development I and II  
S-N only, 0.7 credit(s), max credits 1.4;  
Instructor: Phair, Craig B  
Description: The purpose of this course is to develop specific psychomotor skills through the use of virtual reality training that will better prepare dental students for the further development of their skills in the Prosthodontics and Operative courses. Psychomotor skills, mirror skills and proper ergonomics through the preparation of intra-coronal cavity preparations will be the emphasis of this course. Objective feedback utilized by the "Dent Sim" technology will provide the student instantaneous evaluation of their progress.

DDS 6436 Operative Dentistry II  
A-F only, 2.1 credit(s);  
Instructor: Phair, Craig B  
Description: Student may contact the instructor or department for information.

DDS 6437 Operative Dentistry II Lab  
A-F only, 2.9 credit(s);  
Instructor: Phair, Craig B  
Description: Student may contact the instructor or department for information.

DDS 6439 Operative Dentistry IV  
A-F only, 1.4 credit(s);  
Instructor: Zidan, Omar  
Description: Student may contact the instructor or department for information.

DDS 6475 Preclinical Prosthodontics Techniques Lecture IV  
A-F only, 1.8 credit(s);  
Instructor: Cook, Gary Eugene  
Description: Student may contact the instructor or department for information.

DDS 6476 Preclinical Prosthodontic Technique Laboratory IV, Complete Dentures  
A-F only, 2.3 credit(s);  
Instructor: Cook, Gary Eugene  
Description: Student may contact the instructor or department for information.
DDS 6496 Predoctoral Prosthodontic Honors Course
  S-N only, 1.3 credit(s);
  Instructor: Conrad, Heather Joan
  Description: This clinical, laboratory and seminar based course is designed to provide the senior dental honors student with a fundamental and an advanced level of theory and practice in complete denture construction and implant restoration.

DDS 6511 Foundations of Interprofessionalism, Communication, and Collaboration
  S-N only, 1 credit(s);
  Instructor: Lopez, Naty
  Description: Student may contact the instructor or department for information.

DDS 6608 Elective Externship I
  S-N only, 1-5 credit(s), max credits 5, 1 completion allowed; Credit will not be granted if credit has been received for: DDS 6609;
  Instructor: Berthold, Peter
  Description: Student may contact the instructor or department for information.

DDS 6609 Elective Externship II
  S-N only, 1-5 credit(s), max credits 5, 1 completion allowed; Credit will not be granted if credit has been received for: DDS 6608;
  Instructor: Berthold, Peter
  Description: Student may contact the instructor or department for information.

DDS 6610 Elective Externship III
  S-N only, 1-5 credit(s), max credits 5, 1 completion allowed; Credit will not be granted if credit has been received for: DDS 6608;
  Instructor: Berthold, Peter
  Description: Student may contact the instructor or department for information.

DDS 6611 Elective Short Term Externship IV
  S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
  Instructor: Berthold, Peter
  Description: (Fourth in a sequence of courses.) Short Term Externships. This course will accommodate a dental student who seeks a short term externship to broaden their experience of oral health research, delivery of dental care or healthcare policies by exposure to different schools, hospitals or institutions in the United States or elsewhere in the world including participation in an approved international exchange program. (1.0-5.0 cr; S/N). Dr. Peter Berthold: berthold@umn.edu.

DDS 6613 Endodontic Topics for the General Dentist
  S-N only, 0 credit(s);
  Instructor: Baisden, Michael Kenneth
  Description: Student may contact the instructor or department for information.

DDS 6615 Oral and Maxillofacial Pathology Independent Study
  S-N only, 1 credit(s), max credits 2;
  Instructor: Rohrer, Michael D
  Description: Oral & Maxillofacial Pathology Independent Study (Honors Oral Pathology). Students participate in independent projects in oral and maxillofacial pathology designed by the faculty and student. This elective covers primarily retrospective surgical pathology studies although active laboratory research may be possible. (1.0 cr, S/N) Dr. Michael Rohrer: rohre008@umn.edu.

DDS 6616 Advanced Simulation Clinic Elective I
  S-N only, 0.5 credit(s);
  Instructor: Berthold, Peter
  Description: Advanced Simulation Clinic Elective I - Exposes students to operative dental procedures and the advanced simulation clinic. Further develops psycho-motor skills so basic operative preparations can be performed according to specifications of DentSim software at an acceptable level. (0.5 cr, S/N) Dr. Peter Berthold: berthold@umn.edu

DDS 6617 Advanced Simulation Clinic Elective II
S-N only, 0.5 credit(s);  
Instructor: Berthold,Peter  
Description: Advanced Simulation Clinic Elective II - Provides additional exposure to development of psychomotor skills with emphasis on further operative procedures and crown preparations using DentSim software. (0.5 cr, S/N) Dr. Peter Berthold: berthold@umn.edu

DDS 6619 Moderate Sedation Techniques  
S-N only, 0 credit(s);  
Instructor: Swift,James Q  
Description: Student may contact the instructor or department for information.

DDS 6621 Introduction to CAD/CAM Restorations  
S-N only, 2 credit(s);  
Instructor: Zidan,Omar  
Description: Introduction to CAD/CAM CEREC Restorations. Course emphasizes clinical aspect and delivery of CAD/CAM restorations to patients. (2.0 cr; S/N) Dr. Omar Zidan: zidano@umn.edu.

DDS 6623 Oral Disease Clinic Elective  
S-N only, 0 credit(s);  
Instructor: Madden,Richard P  
Description: Student may contact the instructor or department for information.

DDS 6625 Pediatric Dentistry Honors Elective  
A-F only, 0.5 credit(s);  
Instructor: Yesil,Jasmine  
Description: Student may contact the instructor or department for information.

DDS 6911 Essentials of Clinical Care: D3  
S-N only, 4-18 credit(s), max credits 54, 3 completions allowed;  
Instructor: Nadeau,Richard D  
Description: Student may contact the instructor or department for information.

DDS 6918 Evidence Based Dentistry  
A-F only, 1 credit(s);  
Instructor: Anderson,Gary C  
Description: Student may contact the instructor or department for information.

DDS 6921 Essentials of Clinical Care: D4  
S-N only, 2-18 credit(s), max credits 54, 3 completions allowed;  
Instructor: Nadeau,Richard D  
Description: Student may contact the instructor or department for information.

Dutch  
320 Folwell Hall

Dtch 1001 Beginning Dutch  
5 credit(s); Credit will not be granted if credit has been received for: DTCH 4001;  
Instructor: van der Hoek,Michel  
Description: Student may contact the instructor or department for information.

Dtch 1003 Intermediate Dutch  
5 credit(s); 1002Credit will not be granted if credit has been received for: DTCH 4003;  
Instructor: Oosterhoff,Jenneke A  
Description: Hallo, leuk je weer te zien! Ik ben blij dat je weer met Nederlands meedoet. This course continues the presentation of language skills (speaking, writing, listening and reading) begun in Dutch 1001-2, with special focus on the extension of speaking and writing skills. The main books are the text book and DVD of "Nederlands in Actie". This book is accompanied by audio and video materials which the instructor will use in class and you are expected to use at home. Class time will be devoted mostly to speaking and pre-writing activities. You will write 6 formal essays, each of which will be followed by a rewrite. In addition, you will read two Dutch novels, followed by film viewings. The course includes a variety of supplementary materials on Dutch life and culture: video sections from Dutch TV, information from Dutch websites, Dutch film, etc. You should expect an average of three hours of outside preparation.
Dtch 3011W Conversation and Composition
3 credit(s); 1004 or 4004 or instr consent Credit will not be granted if credit has been received for: DTCH 4011; Meets CLE req of Writing Intensive
Instructor: Oosterhoff, Jennieke A
Description: This course is communicatively oriented and designed to refine advanced students' oral and written expression in Dutch and aid in the development of critical analysis skills. Class Description: Images of childhood in Dutch literature and film. Recently, the Dutch children's book market has seen a revival of old children's bestsellers that I, my parents, and in some cases even my grandparents had on their bookshelves. And not only that; some of these older stories have also been adapted for film. In this course, we will follow these old time heroes and their modern time successors and investigate how trials and tribulations, joys and sorrows of Dutch childhood have changed over time, and ask ourselves whether and how the current social-cultural climate in the Netherlands may have caused this nostalgic look at the past.
Style: 10% Lecture, 10% Film/Video, 30% Discussion, 30% Small Group Activities, 10% Student Presentation, 10% Web Based.
Grading: 50% reports/papers, 10% written homework, 10% journal, 10% in-class presentation, 20% class participation. reading journals and other informal writing assignments of varying lengths
Exam Format: essays

Dtch 3310 Studies in Dutch Literature: Colonial Literature
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Oosterhoff, Jennieke A
Description: This course is communicatively oriented and designed to refine advanced students' oral and written expression in Dutch and aid in the development of critical analysis skills. Class Description: Images of childhood in Dutch literature and film. Recently, the Dutch children's book market has seen a revival of old children's bestsellers that I, my parents, and in some cases even my grandparents had on their bookshelves. And not only that; some of these older stories have also been adapted for film. In this course, we will follow these old time heroes and their modern time successors and investigate how trials and tribulations, joys and sorrows of Dutch childhood have changed over time, and ask ourselves whether and how the current social-cultural climate in the Netherlands may have caused this nostalgic look at the past.
Style: 10% Lecture, 10% Film/Video, 30% Discussion, 30% Small Group Activities, 10% Student Presentation, 10% Web Based.
Grading: 50% reports/papers, 10% written homework, 10% journal, 10% in-class presentation, 20% class participation. reading journals and other informal writing assignments of varying lengths
Exam Format: essays

Dtch 3993 Directed Studies
1-5 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

Dtch 4001 Beginning Dutch
2 credit(s); 1004 in another language or passing score on LPE or grad student Credit will not be granted if credit has been received for: DTCH 1001;
Instructor: van der Hoek, Michel
Description: Student may contact the instructor or department for information.

Dtch 4003 Intermediate Dutch
2 credit(s); 1004 in another language or passing score on LPE or grad student Credit will not be granted if credit has been received for: DTCH 1003;
Instructor: Oosterhoff, Jennieke A
Description: Hallo, leuk je weer te zien! Ik ben blij dat je weer met Nederlands meedoet. This course continues the presentation of language skills (speaking, writing, listening and reading) begun in Dutch 1001-2, with special focus on the extension of speaking and writing skills. The main books are the text book and DVD of "Nederlands in Actie". This book is accompanied by audio and video materials which the instructor will use in class and you are expected to use at home. Class time will be devoted mostly to speaking and pre-writing activities. You will write 6 formal essays, each of which will be followed by a rewrite. In addition, you will read two Dutch
novels, followed by film viewings. The course includes a variety of supplementary materials on Dutch life and culture: video sections from Dutch TV, information from Dutch websites, Dutch film, etc. You should expect an average of three hours of outside preparation per class session. See the description for Dtc 4003 for an option for qualified students to register for this course for 2 credits instead of 4 credits.

**Style:** 20% Lecture, 10% Film/Video, 40% Discussion, 30% Small Group Activities. pre-writing and interactive exercises

**Grading:** 10% mid exam, 10% final exam, 30% reports/papers, 30% quizzes, 20% class participation.

**Exam Format:** quizzes, tests, essays

### Dtc 4011 Conversation and Composition

2 credit(s); Grad student Credit will not be granted if credit has been received for: DTCH 3011W;  
Instructor: Oosterhoff, Jennike A  
**Description:** Student may contact the instructor or department for information.

### Dtc 5993 Directed Studies

1-4 credit(s), max credits 12, 12 completions allowed;  
Instructor: STAFF  
**Description:** Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

### Early Modern Studies 1030 Heller Hall

EMS 8100 Workshop in Early Modern Studies  
S-N only, 1-3 credit(s), max credits 3, 3 completions allowed;  
Instructor: Shank, JB  
**Description:** Student may contact the instructor or department for information.

EMS 8250 Seminar in Early Modern Studies  
3 credit(s), max credits 6;  
Instructor: Shank, JB  
**Description:** Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Expansion of Europe, 1000-1750: Archival Research  
3 credit(s), max credits 6;  
Instructor: Ragnow, Marguerite  
**Description:** Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Early Globalities I  
3 credit(s), max credits 6;  
Instructor: Noakes, Susan J  
**Description:** Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Comparative Economic History  
3 credit(s), max credits 6;  
Instructor: Isett, Christopher Mills  
**Description:** Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Narrative, History and Memory: Reading the City  
3 credit(s), max credits 6;  
Instructor: Brewer, Daniel  
**Description:** Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Shakespeare and Comedy  
3 credit(s), max credits 6;  
Instructor: Scheil, Katherine West  
**Description:** ENGL 8150 Seminar in Shakespeare and Adaptation Katherine Scheil What do singer/songwriter Rufus Wainwright, South African playwright Welcome Msomi, filmmaker Julie Taymor, and contemporary novelist Margaret Atwood all have in common? They all have adapted the works of Shakespeare. This interdisciplinary seminar explores the rich wealth of material
connected with the various versions and reactions to the works of Shakespeare for over four hundred years, from 1611 to 2011. The
course will center on the various receptions, adaptations, and distributions of Shakespeare over the last four centuries, in a variety of
media, including film, theatre, poetry, prose, art, music, and the Internet. We will also focus on recent theories of adaptation and their
relationship to the notions of originality and authenticity. This seminar should attract students interested in Shakespeare; in the various
international authors, artists, and filmmakers who have engaged with his work; in interdisciplinary work; and in broader historical and
ideological issues related to adaptation, canonicity, authenticity, and forms of political, cultural, and artistic expression.

EMS 8500 Topics in Early Modern Studies: Baroque Rome: Art and Politics in Papal Capital
3 credit(s), max credits 6;
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development
of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context,
with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

EMS 8500 Topics in Early Modern Studies: Early Modern Political Thought
3 credit(s), max credits 6;
Instructor: Tronto, Joan C
Description: Student may contact the instructor or department for information.

Earth Sciences 106 Pillsbury Hall

ESci 1001 Earth and Its Environments
4 credit(s); Credit will not be granted if credit has been received for: ESCI 1101; Meets CLE req of Environment; meets CLE req
of Physical Sciences
Instructor: Kirkby, Kent Charles
Description: Geology is the study of the Earth and its life. This is the world you live in and whether you're aware of them or not,
geological processes have played an integral role in shaping our society and will affect your entire life. GEO 1001 is an introduction to
physical geology, including the Earth's materials, dynamic processes, and evolution. Earth's physical and biological systems are
intimately linked - human civilization being the most recent example. Human cultures are based on Earth resources and processes.
Geological factors have played a pivotal role in our past and will largely determine our future. In turn, the human impact on earth
systems is nearly unprecedented. In a relatively short period of time, humans have become one of the most potent geological forces.
As human population and consumption continue to increase, it is critical that our society gains a better basic understanding of
geological processes, in order to better manage our own future. GEO 1001 satisfies the Council on Liberal Education's requirements
for both the environmental theme and as a physical science with lab. This course is designed for undergraduate students who are not
geology majors and there are no prerequisites.
Style: 60% Lecture, 40% Laboratory.
Grading: 65% quizzes, 35% laboratory evaluation.
Exam Format: Lecture quizzes are a combination of multiple choice and short answer. Lab exams are mostly short answer questions.

ESci 1001 Earth and Its Environments
4 credit(s); Credit will not be granted if credit has been received for: ESCI 1101; Meets CLE req of Environment; meets CLE req
of Physical Sciences
Instructor: Teyssier, Christian
Description: INSTRUCTOR: Christian Teyssier Email: teyssier@umn.edu OFFICE HOURS: Thursdays, 11:15AM -12:05PM or by
appointment; take advantage of Email to formulate your questions. I will also create a Ning-like site so we can chat at pre-determined
times. ALL QUESTIONS REGARDING THE LAB: Kent Kirkby, kirkby@umn.edu Course description EARTH AND ITS
ENVIRONMENTS is a course on our planet's dynamic systems. These systems involve internal processes that control core and mantle
convection and drive the motion of tectonic plates, creating the most spectacular mountains and canyons accompanied by dramatic
seismic and volcanic activity. In addition, external processes control the evolution of glaciers, streams, groundwater, oceans, and
atmospheric circulations. The new challenges in the Earth sciences are to understand the rock record in the context of these governing
forces, and to resolve the spatial and temporal relationships between external and internal processes. We will also examine the
records of global climate change and evaluate the impact of these changes on the environment and life on Earth: what do we know
and/or speculate about our future and that of our planet? Course materials Lecture Text: Geology by Chernicoff and Whitney (4th
Edition) Used and new copies are available at the bookstore in Coffman Union.
Style: 40% Lecture, 10% Film/Video, 20% Discussion, 30% Laboratory.
Grading: 65% quizzes, 35% laboratory evaluation.

ESci 1001 Earth and Its Environments
4 credit(s); Credit will not be granted if credit has been received for: ESCI 1101; Meets CLE req of Environment; meets CLE req
ESci 1001 Earth and Its Environments

4 credit(s); Credit will not be granted if credit has been received for: ESCI 1101; Meets CLE req of Environment; meets CLE req of Physical Sciences

Instructor: Fayon, Annia

Description: This course is an introduction to physical geology and natural cycles. Earth systems operate in cycles, and we, as individuals and a society, are fundamentally linked to these cycles, and therefore inevitably impact our local and global environment. In order to understand our impact, it is necessary to grasp basic principles of processes that form this dynamic earth. The course is loosely divided into three sections. The first part primarily focuses on physical geology principles related to the formation of rocks, continents, mountains, and ocean basins, and geologic time. The second part of the course focuses on earth surface processes and the environment, including natural hazards. Students will also develop an understanding of how geoscientists use the rock record to evaluate changing environments and climate through time. The last section of the course introduces students to the formation of our natural resources, including groundwater, metals, non-metals, and fossil fuels, and how the location of these resources contributes to the present-day economic and political "environment". Throughout the semester, students will practice the scientific method by applying geologic principles in coordinated lecture-laboratory exercises. This will allow students to develop a scientific intuition and an appreciation for the multidisciplinary nature of earth science.

ESci 1006 Oceanography

4 credit(s); Credit will not be granted if credit has been received for: GEO 5006; Meets CLE req of Environment; meets CLE req of Physical Sciences

Instructor: Seyfried Jr, William E

Description: Welcome to Oceanography! Although the oceans surround us, in many ways they remain more mysterious than the surface of the Moon. The world oceans include the deepest places and the largest mountains on earth, a dynamic and ever-changing pattern of waves, tides, and currents, and an array of unfamiliar creatures that live in a three-dimensional solution of life-sustaining chemical nutrients. In the short space of a semester, this course will try to provide at least a flavor of this complex and fascinating part of our world. We start with the evolution of the Earth and the formation of the oceans, and explore why and how seawater is what it is. Recently discovered spectacular geysers of hot seawater issuing from vents on the ocean floor, not only help to regulate seawater chemistry, but provide a unique environment for unusual microbial species, which serve as the base of the food chain for a diverse community of organisms. Next, we consider the dynamics of the great water masses, currents like the Gulf Stream, and the waves and tides that directly affect the lives of people on and near the sea. We then examine biological production and decomposition of organic matter and how they control nutrient distributions. The course ends with a look at how oceans and climate have evolved over time and where we may be headed in the future. Throughout the course, we emphasize ways in which the oceans directly affect humankind. Some examples include ocean-atmosphere interactions, which account for the El Niño phenomenon that has such a profound affect on global weather patterns and the human condition on Earth; tsunamis, which can influence people's lives in virtually all coastal communities; coastal storms and the effects they produce; and the oceans and global warming. We also work on questions of marine policy, fishing, and marine mineral resources from the perspectives of human impacts.

Style: 55% Lecture, 40% Laboratory, 5% Small Group Activities.

Grading: 25% final exam, 42% quizzes, 33% laboratory evaluation.

ESci 1007 From Microbes to Mammoths: History of Life on Earth

4 credit(s); Meets CLE req of Biological Sciences

Instructor: Fox, David L

Description: GEO 1007 explores scientific evidence from biology, paleontology, and geology for the origin and subsequent evolution of life over the 4.5 billion year history of our planet. Earth appears to be unique in its habitability, and the origin of life on Earth was one of the most important events in our planet's history. The ongoing evolution of life affects the composition of our atmosphere and ocean, changes the nature of geological processes such as weathering and sedimentation, and alters cycling of the major elements critical for living organisms. This course will introduce fundamental concepts in modern biology and geology, and consider the many interactions between biological and geological processes. The course will also cover important events and transitions in the history of life, such as the origin of life, the origin of multicellular organisms, the evolution of life on land, mass extinction events that nearly erased all life, and the evolution of dinosaurs, whales, and humans.

ESci 1012 Natural Hazards and Disasters

3 credit(s); Meets CLE req of Technology and Society

Instructor: Kirkby, Kent Charles

Description: As its name implies, this course explores the many roles that natural hazards and disasters have played in human history
and our present world. However, the title also reflects a less obvious truth; although natural hazards are quite common, relatively few disasters are entirely natural in origin. To reach the level of a disaster, events almost always require a human component, ranging from simple ignorance of natural systems to complex interactions that can actually create or trigger the disaster. This course satisfies Liberal Education requirements for the Technology and Society theme, so we will investigate the many ways that human technologies mitigate or compound the effects of natural hazards. From the development of mortar and brick that forever raised the stakes of earthquake events, to twitter and text messaging that now allow quake warnings to outtrace seismic waves, technology not only influences how natural events influence us, but even makes us culpable in creating some hazards and disasters. Throughout the course we will explore the disparate roles that natural hazards and disasters have played in human history; not simply their toll in lives, but their influence on politics and history as well as their contributions to art, literature, and philosophy. The course will wrap up with a summary of the more pressing natural hazards facing current society and the need for new technologies and practices that might offset or minimize these very real risks.

**Style:** 100% Lecture.

**Grading:** 100% quizzes. Course grade will be based on best 5 of 7 biweekly quizzes and the final quiz.

**Exam Format:** Multiple choice and short answer

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**ESci 1101 Introduction to Geology**

3 credit(s); Credit will not be granted if credit has been received for: ESCI 1001; Meets CLE req of Environment

**Instructor:** Kirkby, Kent Charles

**Description:** GEO 1101 is the lecture-only version of GEO 1001. Geology is the study of the Earth and its life. This is the world you live in and whether you're aware of them or not, geological processes have played an integral role in shaping our society and will affect your entire life. GEO 1101 is an introduction to physical geology, including the Earth's materials, dynamic processes, and evolution. Earth's physical and biological systems are intimately linked - human civilization being the most recent example. Human cultures are based on Earth resources and processes. Geological factors have played a pivotal role in our past and will largely determine our future. In turn, the human impact on earth systems is nearly unprecedented. In a relatively short period of time, humans have become one of the most potent geological forces. As human population and consumption continue to increase, it is critical that our society gains a better basic understanding of geological processes, in order to better manage our own future. GEO 1101 satisfies the Council on Liberal Education's requirements for the environmental theme. This course is designed for undergraduate students who are not geology majors and there are no prerequisites.

**Style:** 100% Lecture.

**Grading:** 100% quizzes.

**Exam Format:** Lecture quizzes are a mixture of multiple choice and short answer questions.

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**ESci 1101 Introduction to Geology**

3 credit(s); Credit will not be granted if credit has been received for: ESCI 1001; Meets CLE req of Environment

**Instructor:** Teysssier, Christian

**Description:** INSTRUCTOR: Christian Teysssier Email: teysssier@umn.edu OFFICE HOURS: Thursdays, 11:15AM - 12:05PM or by appointment; take advantage of Email to formulate your questions. I will also create a Ning-like site so we can chat at pre-determined times. ALL QUESTIONS REGARDING THE LAB: Kent Kirkby, kirkby@umn.edu Course description EARTH AND ITS ENVIRONMENTS is a course on our planet's dynamic systems. These systems involve internal processes that control core and mantle convection and drive the motion of tectonic plates, creating the most spectacular mountains and canyons accompanied by dramatic seismic and volcanic activity. In addition, external processes control the evolution of glaciers, streams, groundwater, oceans, and atmospheric circulations. The new challenges in the Earth sciences are to understand the rock record in the context of these governing forces, and to resolve the spatial and temporal relationships between external and internal processes. We will also examine the records of global climate change and evaluate the impact of these changes on the environment and life on Earth: what do we know and/or speculate about our future and that of our planet? Course materials Lecture Text: Geology by Chernicoff and Whitney (4th Edition) Used and new copies are available at the bookstore in Coffman Union.

**Style:** 40% Lecture, 10% Film/Video, 20% Discussion, 30% Laboratory.

**Grading:** 65% quizzes, 35% laboratory evaluation.

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**ESci 1101 Introduction to Geology**

3 credit(s); Credit will not be granted if credit has been received for: ESCI 1001; Meets CLE req of Environment

**Instructor:** Stout, James H

**Description:** Student may contact the instructor or department for information.

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**ESci 1101 Introduction to Geology**

3 credit(s); Credit will not be granted if credit has been received for: ESCI 1001; Meets CLE req of Environment

**Instructor:** Fayon, Anna

**Description:** This course is an introduction to physical geology and natural cycles. Earth systems operate in cycles, and we, as individuals and a society, are fundamentally linked to these cycles, and therefore inevitably impact our local and global environment. In
order to understand our impact, it is necessary to grasp basic principles of processes that form this dynamic earth. The course is loosely divided into three sections. The first part primarily focuses on physical geology principles related to the formation of rocks, continents, mountains, and ocean basins, and geologic time. The second part of the course focuses on earth surface processes and the environment, including natural hazards. Students will also develop an understanding of how geoscientists use the rock record to evaluate changing environments and climate through time. The last section of the course introduces students to the formation of our natural resources, including groundwater, metals, non-metals, and fossil fuels, and how the location of these resources contributes to the present-day economic and political ‘environment’. Throughout the semester, students will practice the scientific method by applying geologic principles in coordinated lecture-laboratory exercises. This will allow students to develop a scientific intuition and an appreciation for the multidisciplinary nature of earth science.

**ESci 1106 Oceanography**

3 credit(s); Credit will not be granted if credit has been received for: ESCI 1006; Meets CLE req of Environment

**Instructor:** Seyfried Jr, William E

**Description:** Welcome to Oceanography! Although the oceans surround us, in many ways they remain more mysterious than the surface of the Moon. The world oceans include the deepest places and the largest mountains on earth, a dynamic and ever-changing pattern of waves, tides, and currents, and an array of unfamiliar creatures that live in a three-dimensional solution of life-sustaining chemical nutrients. In the short space of a semester, this course will try to provide at least a flavor of this complex and fascinating part of our world. We start with the nature of the ocean basins: their physical structure and evolution. We then examine the linkage between the evolution of the Earth and the formation of the oceans, and explore why and how seawater is what it is. Recently discovered spectacular geysers of hot seawater issuing from vents on the ocean floor, not only help to regulate seawater chemistry, but provide a unique environment for unusual microbial species, which serve as the base of the food chain for a diverse community of organisms. Next, we consider the dynamics of the great water masses, currents like the Gulf Stream, and the waves and tides that directly affect the lives of people on and near the sea. We then examine biological production and decomposition of organic matter and how they control nutrient distributions. The course ends with a look at how oceans and climate have evolved over time and where we may be headed in the future. Throughout the course, we emphasize ways in which the oceans directly affect humankind. Some examples include ocean-atmosphere interactions, which account for the El Niño phenomenon that has such a profound affect on global weather patterns and the human condition on Earth; tsunamis, which can influence people’s lives in virtually all coastal communities; coastal storms and the effects they produce; and the oceans and global warming. We also work on questions of marine policy, fishing, and marine mineral resources from the perspectives of human impacts.

**Style:** 95% Lecture, 5% Small Group Activities.

**Grading:** 38% final exam, 62% quizzes.

**Exam Format:** Short answer, multiple choice
Instructor: Hudleston, Peter John
Description: Student may contact the instructor or department for information.

**ESci 2201 Solid Earth Dynamics**
A-F only, 4 credit(s);
Instructor: Moskowitz, Bruce Matthew
Description: Student may contact the instructor or department for information.

**ESci 2301 Mineralogy**
3 credit(s);
Instructor: Feinberg, Joshua M.
Description: Student may contact the instructor or department for information.

**ESci 3004 Water and Society**
3 credit(s);
Instructor: Ito, Emi
Description: Designed for non-science majors, this course is a study of the processes that influence the formation, circulation, and modification of water at, or near, the surface of the earth. The role of humans as agents influencing the composition and use of water resources through agricultural, industrial, and other land-use practices will be emphasized. The course begins with a detailed analysis of the physical aspects of the hydrologic cycle and the chemical and physical nature of water on earth. Building from this science of natural water systems, students will investigate the sensitivity and vulnerability of these systems to change as well as the potential impact of human activity on water resources. Students will be asked to consider the role of politics and ethics in developing environmental policy on issues such as toxic and nuclear waste disposal, agricultural non-point source pollution, flood control, river and lake pollution on both short- and long-term time scales. The course will draw heavily on examples from Minnesota so that students can better identify with the ethical dilemmas posed by competing viewpoints on environmental protection versus economic growth.
*Style:* 80% Lecture, 20% Discussion. optional field trips
*Grading:* 25% mid exam, 35% final exam, 40% reports/papers.
*Exam Format:* Essay questions, short answers, multiple choice questions

**ESci 3004 Water and Society**
3 credit(s);
Instructor: Alexander Jr, E Calvin
Description: Designed for non-science majors, this course is a study of the processes that influence the formation, circulation, and modification of water at, or near, the surface of the earth. The role of humans as agents influencing the composition and use of water resources through agricultural, industrial, and other land-use practices will be emphasized. The course begins with a detailed analysis of the physical aspects of the hydrologic cycle and the chemical and physical nature of water on earth. Building from this science of natural water systems, students will investigate the sensitivity and vulnerability of these systems to change as well as the potential impact of human activity on water resources. Students will be asked to consider the role of politics and ethics in developing environmental policy on issues such as toxic and nuclear waste disposal, agricultural non-point source pollution, flood control, river and lake pollution on both short- and long-term time scales. The course will draw heavily on examples from Minnesota so that students can better identify with the ethical dilemmas posed by competing viewpoints on environmental protection versus economic growth.
*Style:* 80% Lecture, 20% Discussion. optional field trips
*Grading:* 25% mid exam, 35% final exam, 40% reports/papers.
*Exam Format:* Essay questions, short answers, multiple choice questions

**ESci 3093 Problems in Earth Sciences: Junior**
1-4 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Students interested in working on a particular problem or issue in either geology or geophysics can contact the department office for referral to appropriate faculty members. Students will work on a one-to-one basis with a faculty member. Projects may include literature review, laboratory or field work, or computer modeling. Depending on the scale of the project students can earn from 1-4 credits for each project. This course may be taken more than once when different problems are pursued.
*Style:* varies with instructions
*Grading:* varies with instructions
*Exam Format:* varies with instructions

**ESci 3202 Fluid Earth Dynamics**
4 credit(s);
Instructor: Paola, Chris
Description: Student may contact the instructor or department for information.

**ESci 3303W Geochemical Principles**  
4 credit(s); Meets CLE req of Writing Intensive  
**Instructor:** Edwards, Lawrence  
**Description:** Student may contact the instructor or department for information.

**ESci 3425 Atmospheric Composition and Chemistry**  
A-F only, 3 credit(s);  
**Instructor:** Millet, Dylan Baird  
**Description:** What is the composition of the atmosphere, and why is it changing? In this class we'll examine the processes governing the makeup of Earth's atmosphere and their implications for air pollution, climate, and human welfare. Evolution of the atmosphere; atmospheric structure and transport; biogeochemical cycles of carbon, nitrogen, oxygen, mercury; the greenhouse effect; aerosols; stratospheric ozone loss; oxidizing power of the atmosphere; smog. Cross-listed as ESPM 3425 and ESci 3425. The movie below shows the 2009 ozone hole over Antarctica [credit: NASA]. Prerequisites: CHEM 1021/1022, PHYS 1011, MATH 1271, or equivalents, or instructor consent.

**ESci 4010 Undergraduate Seminar: Current Topics in Earth Sciences**  
1-4 credit(s), max credits 12, 12 completions allowed;  
**Instructor:** STAFF  
**Description:** Seminar courses are offered to undergraduate students on varying topics taught by departmental faculty. Students interested in learning which seminars are offered during a semester should contact either the department office or individual faculty members. Credit for seminar courses vary from 1-4 credits and this course may be taken more than once.  
**Style:** varies with instructions  
**Grading:** varies with instructions  
**Exam Format:** varies with instructions

**ESci 4093 Problems in Earth Sciences: Senior**  
1-4 credit(s), max credits 6, 6 completions allowed;  
**Instructor:** STAFF  
**Description:** Students interested in working on a particular problem or issue in either geology or geophysics can contact the department office for referral to appropriate faculty members. Students will work on a one-to-one basis with a faculty member. Projects may include literature review, laboratory or field work, or computer modeling. Depending on the scope of the project students can earn from 1-4 credits for each project. This course may be taken more than once when different problems are pursued.

**ESci 4094 Senior Thesis**  
2 credit(s), max credits 4;  
**Instructor:** STAFF  
**Description:** This course is intended for senior level majors to engage in independent research under faculty supervision. Students select problems according to individual interests and in consultation with faculty committee. Year long project results in a written thesis and oral defense.  
**Style:** varies with instructions  
**Grading:** varies with instructions  
**Exam Format:** varies with instructions

**ESci 4203 Principles of Geophysical Exploration**  
3 credit(s);  
**Instructor:** Moskowitz, Bruce Matthew  
**Description:** This course deals with the applications of geophysical technique for subsurface exploration and characterization or mineral and energy resources, geotechnical, site investigation, and enviromental problems, and for global studies of the earth's interior. However, the main emphasis is on the shallow subsurface environment. Topics include potential field techniques (gravity and magnetics), seismic exploration (reflection and refraction), and electrical and electromagnetic methods. For each topic, the development will proceed from basic principles through methodology to applications. Grading is based on a combination of problem sets, midterm exams, and a final exam. The course is designed for, but not limited to, undergraduate majors and graduate students in geology, geophysics, geological engineering and related fields.  
**Style:** 100% Lecture.  
**Grading:** 40% mid exam, 30% final exam, 30% problem solving.  
**Exam Format:** mixed short answer, multiple choice, and simple problems
ESci 4203 Principles of Geophysical Exploration  
3 credit(s);  
Instructor: Chandler, Val W  
Description: This course deals with the applications of geophysical techniques for subsurface exploration and characterization of mineral and energy resources, geotechnical, site investigation, and environmental problems, and for global studies of the earth's interior. However, the main emphasis is on the shallow subsurface environment. Topics include potential field techniques (gravity and magnetics), seismic exploration (reflection and refraction), and electrical and electromagnetic methods. For each topic, the development will proceed from basic principles through methodology to applications. Grading is based on a combination of problem sets, midterm exams, and a final exam. The course is designed for, but not limited to, undergraduate majors and graduate students in geology, geophysics, geological engineering and related fields.  
Style: 100% Lecture.  
Grading: 40% mid exam, 30% final exam, 30% problem solving.  
Exam Format: mixed short answer, multiple choice, and simple problems

ESci 4211 Solid Earth Geophysics I  
A-F only, 3 credit(s);  
Instructor: Kohlstedt, David L  
Description: Student may contact the instructor or department for information.

ESci 4402 Biogeochemical Cycles in the Ocean  
3 credit(s);  
Instructor: Matsumoto, Katsumi  
Description: Welcome to Biogeochemical Cycles in the Ocean! In recent decades, oceans have absorbed roughly 30% of the CO2 emitted to the atmosphere by human activities. This capacity will diminish in the future, as the CO2-buffering capacity is eroded and the oceans become more acidic. Nevertheless, the sheer size of the ocean carbon reservoir means that the oceans will remain the ultimate sink for much of anthropogenic CO2 in the coming centuries. Oceans not only play a key role in controlling atmospheric CO2 today, but also were critical in global carbon cycling throughout Earth's history. This course will examine the ocean carbon cycle and its more important controlling processes, such as ocean circulation (physics), primary production and degradation of organic matter (biology), CO2 acid-base reactions (chemistry), and continental weathering and marine sedimentation (geology). The course begins with an examination of ocean physics, including Ekman dynamics, western boundary current, gyre circulation, stratification, intermediate- and deep-water formation, and global thermohaline circulation. Observations of tracers will be used to illustrate theoretical discussion. We will then consider marine biology, such as mechanisms of seasonal bloom, dependence of surface ocean production on nutrients and temperature, and the export of organic matter to the deep ocean. Satellite images and measurements of oxygen, phosphorus, and nitrogen will be used to illustrate these processes and elucidate the spatial and temporal patterns of primary production. The class will examine CO2 chemistry in seawater and air-sea gas exchange, including concepts of solubility and chemical and isotopic equilibrium concentrations. "Bomb" radiocarbon, produced by thermonuclear bomb testing in the 1950-1960s, will be used to constrain the global rate of air-sea gas exchange. To gain a geological perspective, we also consider how long term processes, such as weathering of continental silicate rocks and carbonate sedimentation, help control atmospheric CO2 levels. With this cumulative understanding, the course will conclude by addressing global issues, such as the fate of fossil fuel CO2, glacial-interglacial atmospheric CO2 variations. Interdisciplinary in design, the course will strive for a quantitative description of ocean biogeochemistry, using observations whenever possible to illustrate basic processes and concepts.  
Style: 80% Lecture, 20% Discussion.  
Grading: 30% final exam, 60% written homework, 10% class participation.

ESci 4501 Structural Geology  
3 credit(s);  
Instructor: Hudleston, Peter John  
Description: Structural geology is the study of the structures formed in rocks as a result of deformation, on all scales from the microscopic to the crustal or lithospheric (plates), and on time scales that vary from rapid ? associated with brittle behavior - to extremely slow ? associated with ductile flow. The most important forces applied to crustal rocks are gravitational and tectonic, and they result in rocks everywhere being in a state of stress. Analysis of structures starts with the concepts of stress and strain, with an emphasis on the large permanent strains commonly developed in nature. The course deals with the geological implications of strain theory and the geometry, kinematics and mechanical processes involved in the development of tectonic fabric and structures, moving from the brittle to the ductile regimes. Deformation mechanisms on the grain and microscopic scales are considered. Structures analyzed include joints, faults and folds  
Grading: 37% mid exam, 12% final exam, 10% reports/papers, 40% laboratory evaluation. 3 midterms plus lecture final for lecture part of course. 30% for lab work plus 10% for a lab final. Field trip reports 10%.  
Exam Format: Short essay answers, plus some problems involving numerical calculations.
ESci 5204 Geostatistics and Inverse Theory
3 credit(s);
Instructor: Revenaugh, Justin
Description: Student may contact the instructor or department for information.

ESci 5302 Isotope Geology
A-F only, 3 credit(s);
Instructor: Ito, Emi
Description: This graduate course is intended for those students who either expect to include isotope studies in their thesis work, or for those who need some proficiency in understanding and evaluating isotope data and their interpretation. Half of the course deals primarily with radiogenic isotope chronometers and tracers including nuclear stability and radioactivity, isotope dilution methods, counting statistics, K-Ar, Ar-Ar, Rb-Sr, Sm-Nd, U-Pb, C-14 and U-series disequilibrium systematics. The other half of the course deals with the principles of stable isotope fractionation, and various applications to petrologic, hydrologic, paleoclimatic, and biological studies. Homework sets are designed to increase the understanding of the concepts covered in class.
Style: 100% Lecture.
Grading: 35% mid exam, 45% final exam, 20% other evaluation. homework
Exam Format: short answers, problem solving and short essays

ESci 5302 Isotope Geology
A-F only, 3 credit(s);
Instructor: Edwards, Lawrence
Description: This graduate course is intended for those students who either expect to include isotope studies in their thesis work, or for those who need some proficiency in understanding and evaluating isotope data and their interpretation. Half of the course deals primarily with radiogenic isotope chronometers and tracers including nuclear stability and radioactivity, isotope dilution methods, counting statistics, K-Ar, Ar-Ar, Rb-Sr, Sm-Nd, U-Pb, C-14 and U-series disequilibrium systematics. The other half of the course deals with the principles of stable isotope fractionation, and various applications to petrologic, hydrologic, paleoclimatic, and biological studies. Homework sets are designed to increase the understanding of the concepts covered in class.
Style: 100% Lecture.
Grading: 35% mid exam, 45% final exam, 20% other evaluation. homework
Exam Format: short answers, problem solving and short essays

ESci 5503 Advanced Petrology
3 credit(s);
Instructor: Whitney, Donna L
Description: Student may contact the instructor or department for information.

ESci 5713 Tracers and Karst Hydrogeology
3 credit(s);
Instructor: Alexander Jr, E Calvin
Description: Geo 5713, Tracers and Karst Hydrogeology (sec 1) prereq instructor consent, 3 cr Instructor: Alexander Jr., E Calvin,!! Morse Alumni Teaching Award Winner. Karst Hydrogeology and Tracer Applications is an introduction to karst hydrogeology and to the application of tracers in hydrogeology to determine the source, age, and mixing parameters of the water in various natural reservoirs. The course will cover the physical and chemical principles and processes operating in karst hydrogeology and the use of natural and synthetic chemical and isotopic labels or tracers to follow the movement and mixing of water through the hydrologic cycle. The natural systems and human impacts on those systems will be discussed. The course is aimed at advanced undergraduate students, beginning graduate students, and professionals with a background and interest in hydrogeology. The course is designed to be practical, "hands on" introduction to groundwater tracers and active participation in weekend groundwater trace is a required part of the course. The course will include the preparation and written and oral presentation of a term paper by each student. Text required: "Ground Water Tracers" by S.N. Davis, D.J. Campbell, H.W. Bentley and T.J. Flynn, National Water Association, 1985.
Style: 90% Lecture, 10% Discussion. A weekend dye-trace field trip is required as part of the course.
Grading: 25% mid exam, 25% final exam, 30% reports/papers.
Exam Format: one in class midsemester exam, 1 take home final exam. Objective questions and essays.

ESci 5980 Seminar: Current Topics in Earth Sciences
S-N only, 1-2 credit(s), max credits 8;
Instructor: Kleinspehn, Karen L
Description: Seminar title: Subsurface Geobiology. The seminar will focus on the deep microbial biosphere of both continental and oceanic lithosphere. Topics include the limits of life in the continental vs. oceanic subsurface, reproductive rates (dormancy vs. death), macrofauna in the deep biosphere, microbial interactions with silicates (especially clay minerals) and physical consequences of
biomediated fluid-phase reactions that are recorded in the geologic record. In-class discussion and presentations will be supported by reading assignments from the current geobiologic literature. To receive 2 credits for the seminar, a student needs to write a 10-12 page paper. This seminar is directed toward advanced undergraduates as well as graduate students. S-N grading only.

**Style:** 15% Lecture, 40% Discussion, 35% Student Presentation, 10% Guest Speakers.

**Grading:** 25% in-class presentation, 75% class participation. Percentages listed are for one credit; A 10-12 page paper is required to earn 2 credits for the seminar. S-N only.

**Exam Format:** No exams

### ESci 8001 Introductory Graduate Seminar

- **S-N only, 2 credit(s);**
- **Instructor:** Revenaugh, Justin
- **Description:** Student may contact the instructor or department for information.

### ESci 8601 Introduction to Stream Restoration

- **A-F only, 3 credit(s);** Grad student in CE or ESCI or EEB or WRS or FW or BAE or FR or HORT or ENR or LA or SRSE or instr consent
- **Credit will not be granted if credit has been received for:** EEB 8601;
- **Instructor:** Paola, Chris
- **Description:** Student may contact the instructor or department for information.

### East Asian Studies

**214 Social Sciences Tower**

#### EAS 3461 Introduction to East Asia I: The Imperial Age

- **3-4 credit(s), max credits 4, 1 completion allowed;** Credit will not be granted if credit has been received for: HIST 3461;
- **Instructor:** Wang, Liping
- **Description:** Student may contact the instructor or department for information.

#### EAS 3468 Social Change in Modern China

- **3 credit(s);** Credit will not be granted if credit has been received for: HIST 3468;
- **Instructor:** Wang, Liping
- **Description:** This course explores major issues in modern Chinese society. It begins with the Opium War in 1840 and traces the relationship between anti-drug effort and state building to the 1990s. It examines the New Culture Movement in the 1920s and links it to the emergence of cosmopolitan culture, new women, and popular nationalism. It retells the story of the Great Leap Forward in the 1950s and uses it to analyze the increasing urban/rural gaps under the PRC. It also devotes considerable time to the importance of gender and ethnicity since the early 20th century. Students will achieve a good understanding of modern China through reading and discussing up-to-date scholarship on these above themes and issues. This course is for undergraduate students, both majors and non-majors.
- **Style:** 60% Lecture, 40% Discussion.
- **Grading:** 80% reports/papers, 20% class participation.

#### EAS 3471 Modern Japan, Meiji to the Present (1868-2000)

- **3 credit(s);** Credit will not be granted if credit has been received for: HIST 3471; Meets CLE req of Historical Perspectives
- **Instructor:** Mizuno, Hiromi
- **Description:** From the land of samurai to the only non-Western colonial power, from the destructed nation of WWII "war criminals" to the postwar miracle, Japan went through immense changes from the mid-19th to the 21st century. How did the Japanese leaders and people make these changes and why? How have the Japanese themselves understood their changing nation and relationship to the world? How can we make sense of Japan's complicated past that made the nation the "Japan" we know today? This course explores the intellectual, cultural, and political aspects of Japan's modernization, the Pacific War, and postwar development, using visual images from museums, cartoons, advertisement, and films as well as fictional and non-fictional writings. The course is based on lecture but also integrates various kinds of assignments that stimulate discussion.
- **Style:** 90% Lecture, 10% Film/Video.
- **Grading:** 25% mid exam, 25% final exam, 20% quizzes, 20% attendance, 10% other evaluation. attendance includes participation
- **Exam Format:** Paper writing

### Echocardiography

**University of Minnesota Rochester**

#### Echo 3011 Foundations of Echocardiography

- **A-F only, 8 credit(s);**
- **Instructor:** Finstuen, Joshua Allen
Description: Student may contact the instructor or department for information.

**Echo 3101 Cardiovascular Anatomy & Physiology**
A-F only, 2 credit(s);  
Instructor: Finstuen, Joshua Allen  
Description: Student may contact the instructor or department for information.

**Echo 3301 Clinical Practicum I**
S-N only, 3 credit(s);  
Instructor: Finstuen, Joshua Allen  
Description: Student may contact the instructor or department for information.

**Echo 4112 Ultrasound Physics II**
A-F only, 2 credit(s);  
Instructor: Finstuen, Joshua Allen  
Description: Student may contact the instructor or department for information.

**Echo 4201 Vascular Imaging**
A-F only, 1 credit(s);  
Instructor: Finstuen, Joshua Allen  
Description: Student may contact the instructor or department for information.

**Echo 4211 Congenital Heart Disease**
A-F only, 2 credit(s);  
Instructor: Finstuen, Joshua Allen  
Description: Student may contact the instructor or department for information.

**Echo 4401 Clinical Practicum IV**
A-F only, 8 credit(s);  
Instructor: Finstuen, Joshua Allen  
Description: Student may contact the instructor or department for information.

### Ecology, Evolution, and Behavior 100 Ecology Building

**EEB 3001 Ecology and Society**
A-F only, 3 credit(s); [Jr or sr] recommended; biological sciences students may not apply cr toward major  
Credit will not be granted if credit has been received for: BIOL 3407;  
Meets CLE req of Environment  
Instructor: Powers, Jennifer Sarah  
Description: This course introduces basic concepts in ecology for non-majors, with an emphasis on the application of ecological principles to questions facing society. The three main themes of the course are: 1) natural history and environmental controls on individuals and ecosystems, 2) populations and communities, and 3) ecosystems, landscapes, and global ecology.  
Style: 60% Lecture, 35% Discussion, 5% Student Presentation.  
Grading: 30% mid exam, 20% final exam, 30% reports/papers, 10% written homework, 10% in-class presentation.  
Exam Format: Short-answer, short-essay and graphical interpretation questions.

**EEB 4129 Mammalogy**
A-F only, 4 credit(s);  
Biol 1001 or Biol 2012  
Credit will not be granted if credit has been received for: FW 4129;  
Instructor: Jansa, Sharon A  
Description: A course in mammalian biology, including topics in anatomy, evolution, biogeography, behavior, and ecology. Lab emphasizes identification, distribution, and natural history of mammals, with a focus on North American species. Course is targeted towards upperclass undergraduate biology majors and first or second year graduate students. Biol 1001 or 1009 is a required prerequisite; Biol 2012 is recommended.  
Style: 60% Lecture, 30% Discussion, 10% Laboratory.  
Grading: 30% mid exam, 25% final exam, 15% reports/papers, 30% laboratory evaluation.  

**EEB 4794W Directed Research: Writing Intensive**
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;  
Meets CLE req of Writing Intensive
Instructor: Montgomery, Rebecca Kay
Description: Student may contact the instructor or department for information.

EEB 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Schiff, Leslie Ann
Description: Student may contact the instructor or department for information.

EEB 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Finlay, Jacques C
Description: Student may contact the instructor or department for information.

EEB 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Bee, Mark Allen
Description: Student may contact the instructor or department for information.

EEB 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Travisano, Michael
Description: Student may contact the instructor or department for information.

EEB 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Borer, Elizabeth
Description: Student may contact the instructor or department for information.

EEB 4993 Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Borer, Elizabeth
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Zink, Robert Martin
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Sterner, Robert Warner
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Weiblen, George D
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Cotner, James B
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Packer, Craig
Description: Student may contact the instructor or department for information.
EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Stephens, David William
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Dean, Antony Michael
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Bee, Mark Allen
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Borer, Elizabeth
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Snell-Rood, Emilie
Description: Student may contact the instructor or department for information.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Zuk, Marlene
Description: Student may contact the instructor or department for information.

EEB 5042 Quantitative Genetics
A-F only, 3 credit(s);
Instructor: Shaw, Ruth Geyer
Description: The course begins with consideration of the fundamental processes that influence frequencies of individual genes in populations, including selection, drift, migration and mutation. The remainder of the course concerns inheritance of traits that vary quantitatively. These typically are influenced by several to many genes as well as by environmental conditions. This course, designed for graduate students and for advanced undergraduates majoring in Genetics, EEB, or Biology, has a prerequisite of a general genetics course.
Style: 75% Lecture, 25% Discussion.
Grading: 35% mid exam, 25% final exam, 10% in-class presentation, 30% problem solving. discussion
Exam Format: short essay, problem-solving

EEB 5221 Molecular Evolution
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

EEB 5601 Limnology
3 credit(s);
Instructor: Cotner, James B
Description: In the Limnology course (EEB/Geo 4601) we will examine freshwater ecosystems, with a primary focus on lakes. Topics addressed will include geological (e.g., lake origins), physical (e.g., water movement, light attenuation), chemical (e.g., oxygen, carbon and nutrient dynamics), and biological (e.g., plankton, food webs) processes occurring in aquatic ecosystems, as well as human impacts (e.g., acidification, eutrophication).
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 30% final exam, 15% reports/papers, 15% problem solving, 20% other evaluation. 2nd mid-semester exam
Exam Format: Multiple choice, True/False, short answer, some calculations
EEB 5605 Limnology Laboratory
- A-F only, 2 credit(s);
- Instructor: Finlay, Jacques C
- Description: Student may contact the instructor or department for information.

EEB 8201 Graduate Foundations in Ecology, Evolution and Behavior Semester 1
- A-F only, 0-4 credit(s), max credits 4, 1 completion allowed;
- Instructor: Travisano, Michael
- Description: Student may contact the instructor or department for information.

EEB 8500 NSF GRF Graduate Research Fellowship Proposal Writing Seminar
- S-N only, 1 credit(s), max credits 2;
- Instructor: Lanyon, Scott Merrill
- Description: The primary purpose of this course is to prepare students to submit a competitive fellowship proposal to an external organization (the focus will be on the NSF Graduate Research Fellowship program). During the announced meeting time, we will: 1) discuss a variety of approaches to proposal writing, 2) talk about the importance of knowing the audience for whom you are writing, 3) discuss the proposal review process, 4) discuss strategies for completing the three sections of the NSF GRF proposal, 5) discuss NSF's "Broader Impacts" criterion and the various Broader Impacts opportunities on campus, 6) participate in a number of "Pair & Share" exercises to provide feedback on proposal drafts, 7) discuss a variety of professional development issues, and 8) talk about graduate student participation in EEB's undergraduate writing enriched curriculum. In addition to the announced meeting time, students will be required to get together once a week in small groups (3-4 students each) outside of class to discuss their proposals and to provide each other with feedback.

EEB 8550 Graduate Research Fellowship Proposal Writing Seminar
- S-N only, 1 credit(s), max credits 2;
- Instructor: Lanyon, Scott Merrill
- Description: The primary purpose of this course is to prepare students to submit a competitive fellowship proposal to an external organization (the focus will be on the NSF Graduate Research Fellowship program). During the announced meeting time, we will: 1) discuss a variety of approaches to proposal writing, 2) talk about the importance of knowing the audience for whom you are writing, 3) discuss the proposal review process, 4) discuss strategies for completing the three sections of the NSF GRF proposal, 5) discuss NSF's "Broader Impacts" criterion and the various Broader Impacts opportunities on campus, 6) participate in a number of "Pair & Share" exercises to provide feedback on proposal drafts, and 7) discuss time management ideas. In addition to the announced meeting time, students will be required to get together once a week in small groups (3-4 students each) outside of class to discuss their proposals and to provide each other with feedback.

EEB 8980 Seminar on Current Topics
- S-N only, 1 credit(s), max credits 30, 10 completions allowed;
- Instructor: Hobbie, Sarah E
- Description: Student may contact the instructor or department for information.

EEB 8980 Seminar on Current Topics
- S-N only, 1 credit(s), max credits 30, 10 completions allowed;
- Instructor: Hobbie, Sarah E
- Description: Student may contact the instructor or department for information.

EEB 8980 Seminar on Current Topics
- S-N only, 1 credit(s), max credits 30, 10 completions allowed;
- Instructor: Shaw, Ruth Geyer
- Description: Student may contact the instructor or department for information.

EEB 8990 Graduate Seminar
- 1-3 credit(s), max credits 30, 10 completions allowed;
- Instructor: Shaw, Ruth Geyer
- Description: Student may contact the instructor or department for information.

EEB 8990 Graduate Seminar
- 1-3 credit(s), max credits 30, 10 completions allowed;
- Instructor: Isbell, Forest
Description: Student may contact the instructor or department for information.

EEB 8990 Graduate Seminar
1-3 credit(s), max credits 30, 10 completions allowed;
Instructor: Bee, Mark Allen
Description: Student may contact the instructor or department for information.

EEB 8991 Independent Study: Ecology, Evolution, and Behavior
1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Jansa, Sharon A
Description: Student may contact the instructor or department for information.

EEB 8994 Directed Research
S-N only, 1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Travisano, Michael
Description: Student may contact the instructor or department for information.

Economics 4-101 Hanson Hall

Econ 1101 Principles of Microeconomics
4 credit(s); knowledge of plane geometry and advanced algebra credit will not be granted if credit received for: 1104, 1111, ApEc 1101 Credit will not be granted if credit has been received for: APEC 1101; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: STAFF
Description: Econ 1101 satisfies the CLE requirements of the Social Science Core and of the Global Perspectives Theme. This is an introductory course in Economics. Topics covered include the behavior of consumers, firms, and markets in the domestic and world economy. Interdependencies in the global economy, and effects of global linkages on individual decisions.
Style: 75% Lecture, 25% Discussion.
Grading: All ECON 1101 students (in all sections) will take the midterm exams and final exam at the same time/day; there will be evening exams.
Exam Format: All ECON 1101 lectures (and accompanying recitation sections) will have two common midterm exams and one common final exam. These will be in the evening and will be announced on the course syllabi.

Econ 1102 Principles of Macroeconomics
4 credit(s); [1101 or equiv], knowledge of plane geometry and advanced algebra credit will not be granted if credit received for: 1105, 1112, ApEc 1102 Credit will not be granted if credit has been received for: APEC 1102;
Instructor: STAFF
Description: This is an introductory course in Economics, to be taken after completing Econ 1101. It includes the study of macroeconomic indicators; the role of money; role of fiscal and monetary policy; international trade; interdependencies among nations.
Style: 75% Lecture, 25% Discussion. Discussion section

Econ 1905 Freshman Seminar: Strategic Thinking & Social Interaction
A-F only, 3 credit(s);
Instructor: Sher, Itai
Description: "Strategic Thinking and Social Interaction" Game Theory is a field which studies strategic interaction. This may be important in any situation where a group of people interact and the decisions made by each person depend on the decisions made by others. Game Theory is relevant in many situations including nuclear deterrence and warfare, the theory of auctions, the analysis of different voting systems, political campaigns, competition among firms, and the formation of social networks. Game Theory is also a useful tool for studying concepts which are relevant to many social interactions such as reputation, threats, promises, cooperation, coordination, and incentives. This course will provide an informal introduction to the basic concepts of Game Theory, which does not require any mathematics. We will read and discuss articles about the many areas in which these notions apply.

Econ 3101 Intermediate Microeconomics
4 credit(s); [1101, 1102] or equiv, [MATH 1271 or equiv] Credit will not be granted if credit has been received for: APEC 3001;
Instructor: STAFF
Description: This is a required course for Economics majors, and is a prerequisite for most upper-division Economics courses. It essentially provides you with tools necessary to work with economic theory. Students should have completed Calculus I successfully PRIOR to taking this course. Students are NOT permitted to take Calc I concurrently. The course includes the study of consumer and
producer behavior under competitive and monopolistic conditions; factors influencing production, price, and other decisions of the firm; applications of the theory. The course includes a large lecture taught by an instructor, and discussion sections taught by TAs.

**Style:** 75% Lecture, 25% Discussion.

**Exam Format:** problems, short essays

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**Econ 3102 Intermediate Macroeconomics**

4 credit(s); 3101 or equiv

Credit will not be granted if credit has been received for: APEC 3006;

**Instructor:** STAFF

**Description:** This is one of the two basic tool courses for Economics majors. The prerequisite is Econ 3101, which students must have completed successfully PRIOR to taking this course. Students are NOT permitted to take both concurrently, or take Econ 3102 prior to Econ 3101. The course includes determinants of national income, employment, and price level; effects of fiscal and monetary policies; with an emphasis on a general equilibrium approach. Economic growth is also discussed.

**Style:** 100% Lecture.

**Exam Format:** Problems and short essays

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**Econ 3951 Major Project Seminar**

A-F only, 2 credit(s);

**Instructor:** STAFF

**Description:** A senior project is a requirement for the BA and BA-Q degrees in Economics. Students work with the instructor to produce a significant piece of written work in Economics. Criteria for the paper: to demonstrate critical thinking in Economics; collection and analysis of data; economic analysis and effective interpretation of results. Should be modeled as an economics journal article.

Check the Undergraduate Handbook (web version or hard copy) on the four ways to satisfy this requirement. Students will recieve the syllabus via email.

**Style:** No formal meeting time. Please contact the instructor via email.

**Grading:** 100% reports/papers.

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**Econ 3960 Topics in Economics**

3 credit(s), max credits 6;

**Instructor:** STAFF

**Description:** FALL 2012: The Chinese Economy

**Exam Format:** Essay and short problems

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**Econ 4100W Undergraduate Writing in Economics**

A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** Students can sign up for this one-credit course if they are concurrently registered for an Economics Honors course or for Econ 4831. This will enable them to make the honors course writing intensive. Students receive the assignment from the instructor of the honors course. The Econ 4100W TA works with students to help them write the paper. Students turn in various drafts to the TA and receive feedback on every assignment. The final product is the completed paper.

**Grading:** 100% reports/papers.

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**Econ 4109H Honors Course: Game Theory and Applications**

A-F only, 4 credit(s);

**Instructor:** STAFF

**Description:** This is recommended for Economics majors with a good mathematical background. Normal and extensive forms of Games and applications of games.

**Style:** 90% Lecture, 10% Discussion.

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**Econ 4161 Microeconomic Analysis**

2 credit(s);

**Instructor:** STAFF

**Description:** This is offered concurrently with Econ 8001 (a Ph.D micro theory course for graduate students from other departments). Please contact the instructor before registering for the course. You MUST have completed all prerequisites. This is a seven week mini-semester course worth two credits.

**Style:** 75% Lecture, in recitation section

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**Econ 4162 Microeconomic Analysis**

A-F only, 2 credit(s);
Instructor: STAFF
Description: This is offered concurrently with Econ 8002 (a Ph.D micro theory course for graduate students from other departments). Please contact the instructor before registering for the course. You MUST have completed all prerequisites. This is a seven week mini-semester course worth two credits.
Style: 75% Lecture. in recitation section

**Econ 4165 Macroeconomic Theory**
2 credit(s);
Instructor: STAFF
Description: This is offered concurrently with Econ 8105 (a Ph.D macro theory course for economics graduate students). Please contact the instructor before registering for the course. You MUST have completed all prerequisites. This is a seven week mini-semester course worth two credits.
Style: 75% Lecture. in recitation section

**Econ 4166 Macroeconomic Theory**
2 credit(s);
Instructor: STAFF
Description: This is offered concurrently with Econ 8106 (a Ph.D macro theory course for economics graduate students). Please contact the instructor before registering for the course. You MUST have completed all prerequisites. This is a seven week mini-semester course worth two credits.
Style: 75% Lecture. in recitation section

**Econ 4211 Principles of Econometrics**
4 credit(s);
Instructor: STAFF
Description: This is a required course for Economics B.A.-Quant majors. Students must have successfully completed all prerequisites PRIOR to taking this course. The course includes regression analysis, estimation procedures, and computer applications.
Style: 75% Lecture. Recitation discussion
Exam Format: problems

**Econ 4261 Introduction to Econometrics**
A-F only, 4 credit(s);
Instructor: STAFF
Description: This is a required course for Economics B.S. majors. Students must have completed all prerequisites successfully PRIOR to taking this course. The course includes the basic linear regression model, time series analysis, panel data, discrete choice models. Computer applications (normally GAUSS is used).
Style: 75% Lecture. Recitation discussion
Exam Format: problems

**Econ 4311 Economy of Latin America**
3 credit(s);
Instructor: STAFF
Description: Economic evolution in Latin America since the 1950s. Development, growth, trade, liberalization, poverty, inflation, budgets, other important issues in the Latin American economies.
Style: 90% Lecture, 10% Discussion.
Exam Format: essays

**Econ 4331W Economic Development**
3 credit(s);[3101, 3102] or equivCredit will not be granted if credit has been received for: ECON 4301;Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Econ 4331W is a writing intensive course, and students need at least a C in the paper to pass the course. Economic growth and development - indicators, evidence in low and high income countries. Growth theory. Resource allocation.
Style: 90% Lecture, 10% Discussion.

**Econ 4337 Comparative Economic Systems**
3 credit(s);3101, 3102 or equivCredit will not be granted if credit has been received for: ECON 4307;
Instructor: STAFF
Description: Study of various economic systems, functions and comparisons. Post-socialist transitions in Eastern Europe, Russia,
Asia, and China. Economic reforms. Case studies of various countries.

Style: 90% Lecture, 10% Discussion.
Exam Format: essay, short problems

Econ 4401 International Economics
3 credit(s); Meets CLE req of Global Perspectives
Instructor: STAFF
Description: Econ 4401 satisfies the Global Perspectives Theme requirement as set by the Council on Liberal Education. This course is not for Economics majors. Includes material on international trade and international finance. Theories of trade, trade restrictions, commercial policy. Exchange rates, international monetary systems. Students write a country paper.
Style: 90% Lecture, 10% Discussion.
Exam Format: problems, short essays

Econ 4431W International Trade
3 credit(s); [3101, 3102] or equiv, freshman writing practice
Credit will not be granted if credit has been received for: ECON 4431V
Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Sahi, Simran
Description: Econ 4431W satisfies the Global Perspectives Theme requirement of CLE. It is also a Writing Intensive course. Offered mainly for Economics majors, though we happily accept other students if they have successfully completed the prerequisites PRIOR to taking the course. The course studies international trade including trade theories, trade and growth, trade restrictions, regional trading blocs, protection, and regional integration. This is a writing intensive course, and students need at least a C in the paper to pass the course. Real world applications and examples abound. URL address will be available later.
Style: 90% Lecture, 10% Discussion.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% problem solving. Evaluation is subject to change.
Exam Format: essay and true/false explain.

Econ 4531 Labor Economics
3 credit(s);
Instructor: STAFF
Description: Economic analysis of labor markets; population and labor force; labor market institutions; wage and employment theories; labor unions and bargaining; public policy.
Style: 90% Lecture, 10% Discussion.
Exam Format: problems, short essay

Econ 4631 Industrial Organization and Antitrust Policy
3 credit(s); 3101 or equiv
Credit will not be granted if credit has been received for: ECON 4631H;
Instructor: STAFF
Description: Relations between market structure, economic efficiency and welfare. Economic origins of market imperfections - monopoly and other restraints on competition. Purpose of antitrust and related legislation and effects. Industrial policy. Some case studies. This course is sometimes offered concurrently with Econ 3601.
Style: 90% Lecture, 10% Discussion.
Exam Format: problems and short essays

Econ 4721 Money and Banking
3 credit(s); [3101, 3102] or equiv
Credit will not be granted if credit has been received for: ECON 3701;
Instructor: STAFF
Description: Theories of money demand and money supply. Financial intermediation, banking, nonbank financial institutions, bank regulation. Role of the Federal Reserve System. Monetary policy.
Style: 95% Lecture, 5% Discussion.

Econ 4731 Macroeconomic Policy
3 credit(s);
Instructor: STAFF
Description: The emphasis of this course is on Macroeconomic Policy, studied in a quantitatively rigorous way. We begin by reviewing the household consumption and leisure choice, and the market-clearing model. We then study inflation, unemployment, growth, taxation, government debt, and monetary policy and fiscal policy.
Style: 95% Lecture, 5% Discussion.
Exam Format: problems, short essay
Econ 4751 Financial Economics
  3 credit(s); [3101 or equiv], [MATH 1271 or equiv], one sem statistics
  Credit will not be granted if credit has been received for: ECON 4751H;
  Instructor: STAFF
  Style: 95% Lecture, 5% Discussion.
  Exam Format: problems

Econ 4821 Public Economics
  3 credit(s); = ECON 3801; prereq 3101, 3102 or equiv
  Credit will not be granted if credit has been received for: ECON 3801;
  Instructor: STAFF
  Style: 95% Lecture, 5% Discussion.
  Exam Format: Short essays, problem solving

Econ 4831 Cost-Benefit Analysis
  3 credit(s); 3101 or equiv
  Credit will not be granted if credit has been received for: ECON 4611H;
  Instructor: STAFF
  Description: Principles for evaluating benefits and costs of public projects or programs. Issues concerned with definition of benefits and costs. Rate of return, rate of discount. Market imperfections, risk, and uncertainty. Case studies.
  Style: 95% Lecture, 5% Discussion.
  Exam Format: Essay; problem solving

Econ 4960 Topics in Economics
  A-F only, 3 credit(s), max credits 6;
  Instructor: Richter, Marcel K
  Description: Topics in Social Welfare Economics

Econ 4960H Advanced Topics in Economics Honors
  A-F only, 4 credit(s);
  Instructor: Guvenen, Fatih
  Description: Student may contact the instructor or department for information.

Econ 4993 Directed Study
  1-4 credit(s), max credits 4, 1 completion allowed;
  Instructor: STAFF
  Description: This is for economics honors theses only.

Econ 5890 Economics of the Health-Care System
  A-F only, 3 credit(s); 3101 or instr consent
  Credit will not be granted if credit has been received for: PUBH 6832;
  Instructor: Nyman, John A.
  Description: This course is intended to give the student an understanding of and appreciation for the traditional issues in health economics. Historical, theoretical and empirical perspectives are applied to the various topics covered: the role of prices, the production of health, the demand for health care, the demand for health insurance, the health insurance market and managed care, the market for physicians' services, production and cost of health care in hospitals and nursing homes, labor issues, pharmaceuticals, cost effectiveness analysis, equity and efficiency, role of government in the health economy, international comparisons, Medicaid and Medicare, and national health insurance and reform. The course relies on the use of conventional microeconomic analytical tools. Students should also have a basic knowledge of fundamental descriptive and analytical statistics. Students will not be expected to know calculus.

Econ 8001 Microeconomic Analysis
  2 credit(s);
  Instructor: Werner, Jan
  Description: Student may contact the instructor or department for information.

Econ 8002 Microeconomic Analysis
2 credit(s);
Instructor: Allen,Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 8101 Microeconomic Theory
2 credit(s);
Instructor: Werner,Jan
Description: Student may contact the instructor or department for information.

Econ 8102 Microeconomic Theory
2 credit(s);
Instructor: Allen,Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 8105 Macroeconomic Theory
2 credit(s);
Instructor: Kehoe,Timothy J
Description: Student may contact the instructor or department for information.

Econ 8106 Macroeconomic Theory
2 credit(s);
Instructor: Jones,Larry
Description: Student may contact the instructor or department for information.

Econ 8185 Advanced Topics in Macroeconomics
2 credit(s), max credits 4;
Instructor: Rios-Rull,Jose Victor
Description: Student may contact the instructor or department for information.

Econ 8185 Advanced Topics in Macroeconomics
2 credit(s), max credits 4;
Instructor: Guvenen,Fatih
Description: Student may contact the instructor or department for information.

Econ 8191 Workshop in Mathematical Economics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Rustichini,Aldo
Description: Student may contact the instructor or department for information.

Econ 8191 Workshop in Mathematical Economics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Allen,Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 8205 Applied Econometrics
2 credit(s);
Instructor: Petrin,Amil Kenneth
Description: Student may contact the instructor or department for information.

Econ 8206 Applied Econometrics
2 credit(s);
Instructor: Petrin,Amil Kenneth
Description: Student may contact the instructor or department for information.

Econ 8311 Economic Growth and Development
2 credit(s);
Instructor: Luttmer,Erzo
Description: Student may contact the instructor or department for information.
Econ 8391 Workshop in Economic Growth and Development
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Chari, Varadarajan V
Description: Student may contact the instructor or department for information.

Econ 8401 International Trade and Payments Theory
2 credit(s);
Instructor: Kehoe, Timothy J
Description: Student may contact the instructor or department for information.

Econ 8402 International Trade and Payments Theory
2 credit(s);
Instructor: Kehoe, Patrick James
Description: Student may contact the instructor or department for information.

Econ 8491 Workshop in Trade and Development
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Kehoe, Timothy J
Description: Student may contact the instructor or department for information.

Econ 8501 Wages and Employment
2 credit(s);
Instructor: Guvenen, Fatih
Description: Student may contact the instructor or department for information.

Econ 8581 Advanced Topics in Labor Economics
2 credit(s), max credits 4;
Instructor: Rios-Rull, Jose Victor
Description: Students make presentations of their ongoing research

Econ 8581 Advanced Topics in Labor Economics
2 credit(s), max credits 4;
Instructor: Heathcote, Jonathan
Description: Students make presentations of their ongoing research

Econ 8601 Industrial Organization and Government Regulation
2 credit(s);
Instructor: Holmes, Thomas Joseph
Description: Student may contact the instructor or department for information.

Econ 8602 Industrial Organization and Government Regulation
2 credit(s);
Instructor: Petrin, Amil Kenneth
Description: Student may contact the instructor or department for information.

Econ 8691 Workshop in Applied Microeconomics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Holmes, Thomas Joseph
Description: Student may contact the instructor or department for information.

Econ 8701 Monetary Economics
2 credit(s);
Instructor: Kehoe, Patrick James
Description: Student may contact the instructor or department for information.

Econ 8702 Monetary Economics
2 credit(s);
Instructor: Nicolini, Juan Pablo
Description: Student may contact the instructor or department for information.

Econ 8801 Public Economics
2 credit(s);
Instructor: Jones, Larry
Description: Student may contact the instructor or department for information.

Education and Human Development

EdHD 1620 Current Topics: Strategies for Student Success: Strategies for Successful Group Work
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Bonebright, DeeAnne
Description: This course will provide students with practical strategies to help them thrive as a group member and encourage productive group development. Focus will be on group work in academic courses, but application will also be made to career settings.

EdHD 1620 Current Topics: Strategies for Student Success: Developing your Personal Brand and Online Identity
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Stumne, Jeannie Frances
Description: Personal branding is a way to identify who you are, what differentiates you from others, and what makes you exceptional. A personal brand can expand opportunities for your personal and professional success, now and in the future! This course will put you in control of how people know you and provide you with the experiences, resources and tools you need to not only discover your unique personal brand, but to help you maintain and update your brand as your professional experiences, visions and goals evolve. This course will involve a variety of self discovery activities that will lead you to your unique brand and will end with a roadmap to the actual launch of your online identity. Now is the time to complete this work! It's a course that is perfect for a freshman or sophomore preparing for their first volunteer experience to a junior or senior preparing for their first position in their dream job.

EdHD 1620 Current Topics: Strategies for Student Success: Building Your Professional Network
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Maples, Alyssa
Description: This course will provide you with hands-on experiences that will simplify and demystify the development of your professional network and you will leave with an extensive repository of resources, tools and strategies that will help you maximize your network as your personal and professional experiences and goals evolve.

EdHD 1620 Current Topics: Strategies for Student Success: APA 101: Guidelines and Academic Integrity
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Keeney, Brianne E
Description: Student may contact the instructor or department for information.

EdHD 1620 Current Topics: Strategies for Student Success: Writing Research Proposal from "A to IRB"
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Bhalla PhD, Jennifer Anita
Description: Student may contact the instructor or department for information.

EdHD 1620 Current Topics: Strategies for Student Success: Maximizing the iPad for Academic Success
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Calhoun, Austin Stair
Description: Using three units (digital literacy, productivity, and creativity), this course is designed to teach students to maximize their iPad and to provide a space for academic, professional, and personal explorations of an iPad. Learning Objectives Upon the completion of this course, it is expected that students will be able to: * Achieve a intermediate understanding of iPad operation and troubleshooting skills * Understand cloud-computing as it relates to the iPad * Use an iPad to access course materials, turn in class assignments, and take course evaluations * Create, edit, and share notes, assignments, presentations, and other documents on an iPad * Create, edit, and share dynamic multimedia content (including movies, music, podcasts, and photographs) * Communicate and set up virtual meetings and chats using the iPad * Locate and critically evaluate iPad applications and identify relevance for education

EdHD 1701 Introduction to TRiO: Identity, Culture, and College Success
A-F only, 1 credit(s);
Instructor: Sawyer, Gregory Scott
Description: Student may contact the instructor or department for information.

EdHD 1920 CEHD Special Topics
1-3 credit(s), max credits 6;
Instructor: Boehm, Eva Lynn
Description: Student may contact the instructor or department for information.

EdHD 1920 CEHD Special Topics
1-3 credit(s), max credits 6;
Instructor: Boehm, Eva Lynn
Description: Student may contact the instructor or department for information.

EdHD 1920 CEHD Special Topics
1-3 credit(s), max credits 6;
Instructor: Boehm, Eva Lynn
Description: Student may contact the instructor or department for information.

EdHD 3001 Exploring the Teaching Profession I
A-F only, 2 credit(s);
Instructor: Stone PhD, Karla
Description: Student may contact the instructor or department for information.

EdHD 5001 Learning, Cognition, and Assessment
3 credit(s); MEd/initial licensure student or CLA music ed or preteaching major or instr consent; psych course recommended
Credit will not be granted if credit has been received for: EPSY 3119;
Instructor: Swinburne Romine, Russell E.
Description: OBJECTIVES The main objectives of this course are to: 1. Educate students about current and historical issues in Educational Psychology 2. Introduce students to major psychological theories and research 3. Provide opportunities for students to apply psychological theories to educational practice. LEARNING GOALS Participants in this course will learn about: 1. Theories of cognitive and social development and how they relate to approaches to instruction 2. Behaviorist, cognitive, and social cognitive learning theories 3. Approaches to classroom management, motivation, intelligence, instruction and assessment 4. Issues related to assessment and measuring student learning (validity, reliability, interpretation, etc.) by participating in assessment design (traditional, performance-based)
Style: 50% Lecture, 25% Discussion, 25% Small Group Activities.

EdHD 5001 Learning, Cognition, and Assessment
3 credit(s); MEd/initial licensure student or CLA music ed or preteaching major or instr consent; psych course recommended
Credit will not be granted if credit has been received for: EPSY 3119;
Instructor: Jorczak, Robert L
Description: OBJECTIVES The main objectives of this course are to: 1. Educate students about current and historical issues in Educational Psychology 2. Introduce students to major psychological theories and research 3. Provide opportunities for students to apply psychological theories to educational practice. LEARNING GOALS Participants in this course will learn about: 1. Theories of cognitive and social development and how they relate to approaches to instruction 2. Behaviorist, cognitive, and social cognitive learning theories 3. Approaches to classroom management, motivation, intelligence, instruction and assessment 4. Issues related to assessment and measuring student learning (validity, reliability, interpretation, etc.) by participating in assessment design (traditional, performance-based)
Style: 50% Lecture, 25% Discussion, 25% Small Group Activities.

EdHD 5003 Developmental and Individual Differences in Educational Contexts
A-F only, 2 credit(s);
Instructor: Tholen, Rachel Lynae
Description: Student may contact the instructor or department for information.

EdHD 5003 Developmental and Individual Differences in Educational Contexts
A-F only, 2 credit(s);
Instructor: LoBello, Jana
Description: Student may contact the instructor or department for information.
EdHD 5003 Developmental and Individual Differences in Educational Contexts
A-F only, 2 credit(s);
Instructor: Chhuon,Vichet
Description: Student may contact the instructor or department for information.

EdHD 5005 School and Society
A-F only, 2 credit(s);
Instructor: Howell,Monica Ruth
Description: Student may contact the instructor or department for information.

EdHD 5005 School and Society
A-F only, 2 credit(s);
Instructor: Erickson,Erik Kristian
Description: Student may contact the instructor or department for information.

EdHD 5005 School and Society
A-F only, 2 credit(s);
Instructor: Tobin,Jessica I
Description: Student may contact the instructor or department for information.

EdHD 5007 Technology for Teaching and Learning
A-F only, 1.5 credit(s);
Instructor: Tibesar,Nicholas Thomas
Description: Student may contact the instructor or department for information.

EdHD 5007 Technology for Teaching and Learning
A-F only, 1.5 credit(s);
Instructor: Donna,Joel Dominic
Description: Student may contact the instructor or department for information.

EdHD 5007 Technology for Teaching and Learning
A-F only, 1.5 credit(s);
Instructor: Bakir,Nesrin
Description: Student may contact the instructor or department for information.

EdHD 5008 Reading in the Content Areas for Initial Licensure Candidates
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Rummel,Andrew Michael
Description: Student may contact the instructor or department for information.

EdHD 5009 Human Relations: Applied Skills for School and Society
A-F only, 1 credit(s);
Instructor: Thomas,Matthew A.M.
Description: Student may contact the instructor or department for information.

EdHD 5009 Human Relations: Applied Skills for School and Society
A-F only, 1 credit(s);
Instructor: Kennedy,Douglas P
Description: Student may contact the instructor or department for information.

EdHD 5010 Cultures, Schools, and Communities (Human Relations)
A-F only, 2 credit(s);
Instructor: Goh PhD,Michael P.
Description: Student may contact the instructor or department for information.

EdHD 5014 Child and Adolescent Development for Teaching and Learning
A-F only, 2 credit(s);
Instructor: Chhuon, Vichet
Description: Student may contact the instructor or department for information.

EdHD 5016 Teaching Students with Special Needs in Inclusive Settings
A-F only, 1 credit(s);
Instructor: Zeyer, Virginia Kay
Description: Student may contact the instructor or department for information.

EdHD 5016 Teaching Students with Special Needs in Inclusive Settings
A-F only, 1 credit(s);
Instructor: Dembouski PhD, Lisa
Description: Student may contact the instructor or department for information.

EdHD 5017 Academic Language and English Learners
A-F only, 1 credit(s);
Instructor: Maguire, Caroline Marie
Description: Student may contact the instructor or department for information.

EdHD 5017 Academic Language and English Learners
A-F only, 1 credit(s);
Instructor: Schornack, Miranda Lee
Description: Student may contact the instructor or department for information.

EdHD 5017 Academic Language and English Learners
A-F only, 1 credit(s);
Instructor: Dillard, Elizabeth A
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Literacy Instruction in the Elementary Grades
4 credit(s), max credits 12;
Instructor: Peterson, Debra Stevens
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Literacy Instruction in the Elementary Grades
4 credit(s), max credits 12;
Instructor: Peterson, Debra Stevens
Description: Student may contact the instructor or department for information.

Educational Psychology

3 credit(s), max credits 6;
Instructor: Bart, William M
Description: Examination of the basic components of chess, computer-based chess, how chess players think, including visual-spatial thinking and critical thinking, the psychology of critical thinking and other 21st Century reasoning skills, and research on chess cognition.
Style: See class syllabus
Grading: See syllabus
Exam Format: See syllabus

EPsy 3101 Creativity and Intelligence: an Introduction
OPT No Aud, 3 credit(s); Credit will not be granted if credit has been received for: EPSY 5101;
Instructor: Bart, William M
Description: This course is intended to serve students (undergraduate) interested in intelligence and creativity. The course will feature an examination of theories of intelligence and creativity and perspectives on the assessment and development of intelligence and creativity. Implications for educational practices, psychological research, and the professions and disciplines will also be studied. Attention will be provided to the role of interventions intended to enhance intellectual abilities and creativity and to relevant brain research on creativity and intelligence. The primary readings for the course will be one contemporary paperback text on creativity and one contemporary paperback text on human intelligence. This course will emphasize writing in the evaluation of student performance. Students will work in small groups to complete approximately 3 group discussion short answer essay questions. Students will learn early in the course the essay questions to be used in the course. Each student will complete a critical review of one scholarly article or book chapter, with either the article or the text chapter to be selected by the student, and one final paper. The course will be “Web Enhanced.”
Style: 100% Web Based. presentations; web enhanced course (URL not yet available)
Grading: 27% reports/papers, 20% special projects, 30% quizzes, 20% reflection paper, 3% other evaluation.

EPsy 3119 Learning, Cognition, and Assessment
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: EDHD 5001;
Instructor: Swinburne Romine, Russell E.
Description: OBJECTIVES The main objectives of this course are to: 1. Educate students about current and historical issues in Educational Psychology 2. Introduce students to major psychological theories and research 3. Provide opportunities for students to apply psychological theories to educational practice. LEARNING GOALS Participants in this course will learn about: 1. Theories of cognitive and social development and how they relate to approaches to instruction 2. Behaviorist, cognitive, and social cognitive learning theories 3. Approaches to classroom management, motivation, intelligence, instruction and assessment 4. Issues related to assessment and measuring student learning (validity, reliability, interpretation, etc.) by participating in assessment design (traditional, performance-based)

EPsy 3264 Basic and Applied Statistics
3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231; Meets CLE req of Mathematical Thinking
Instructor: Everson, Michelle G
Description: EPSy 3264 is designed to engage students using a modeling and simulation approach to inference. This course uses pedagogical principles that are founded in research, such as small group activities and discussion. Upon completion of this course, students should have an understanding of the foundational concepts of data, variation and inference, as well as an appreciation for the fundamental role that statistics plays in a host of disciplines, such as business, economics, law, and medicine. This course is intended for undergraduate students who have completed a high school algebra course, but not previously studied statistics. There are no prerequisites for this course. However, students should have familiarity with computers and technology (e.g., internet browsing,
Microsoft Word, opening/saving files, etc.). Tinkerplots software will be used extensively in the course and students will learn during the first week of the semester about how to gain access to this software. Please note that while this is a completely online course, there will be several assignments and discussions that you will be expected to work through on a weekly basis, and there will be important deadlines each week that you will need to meet. The purpose of these activities and assignments is to introduce ideas and content, as well as to deepen understanding of material encountered in the readings. In this course, your learning experience is dependent, to some extent, on your classmates and vice versa. Because of this, it is essential that you stay on top of the work in the course, ask questions when you are struggling, and be an active participant in small-group discussion. The classroom version of this course is discussion based and we have attempted to create a very similar active learning environment in the online course.

**Style:** 100% Web Based.

**Grading:** 5% final exam, 40% quizzes, 40% written homework, 15% class participation.

**Exam Format:** short-answer

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**EPsy 3264 Basic and Applied Statistics**

3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231; Meets CLE req of Mathematical Thinking

**Instructor:** Isaak, Rebekah Ruth

**Description:** Student may contact the instructor or department for information.

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**EPsy 3264 Basic and Applied Statistics**

3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231; Meets CLE req of Mathematical Thinking

**Instructor:** Edwards, Katherine D

**Description:** Student may contact the instructor or department for information.

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**EPsy 3264 Basic and Applied Statistics**

3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231; Meets CLE req of Mathematical Thinking

**Instructor:** Fry, Elizabeth Brondos

**Description:** Student may contact the instructor or department for information.

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**EPsy 3301 Introduction to Educational Psychology**

OPT No Aud, 3 credit(s); Credit will not be granted if credit has been received for: EPSY 5114; Meets CLE req of Social Sciences

**Instructor:** Varma, Sashank

**Description:** NOTE: This course satisfies the Liberal Education Requirment for Social Sciences. This course is an introduction to the theories, data, and methods that compose Educational Psychology. In this regard, it serves as a foundation for future coursework in education and psychology. The first third of the course will review those aspects of developmental psychology that are foundational for education. The second third will consider how cognitive psychology informs questions of learning, memory, knowledge, and reasoning. With this background in place, the final third of the course will focus on the classroom: on instruction, motivation, assessment, and individual differences. The class concludes with lectures on how neuroscience informs education. Knowledge is gained not just by reading and listening, but also by "doing". With this in mind, students will construct much of the knowledge they take away from this class. For example, in one assignment, students will participate in a classic experiment. They will analyze and write-up their data, and in this way gain a deep understanding of the empirical support for proven educational strategies. Through this and similar assignments and projects, students will gain a deep understanding of Educational Psychology. TOPICS Expertise; Cognitive Development; Personal, Sexual, Social, and Moral Development; Group Differences; Behavioral Learning; Cognitive Learning; Problem Solving, Reasoning, and Transfer; Motivation; Instruction; Intelligence; Standardized Testing & Assessment; Neuroscience and Education. For questions or more information, please contact Dr. Sashank Varma (sashank@umn.edu).

**Style:** 75% Lecture, 25% Discussion.

**Grading:** 15% mid exam, 15% final exam, 35% reports/papers, 10% written homework, 15% additional semester exams, 5% attendance, 5% class participation. 10% Class participation; 10% Small assignments; 17.5% Child Observation project; 15% Lesson Analysis project; 17.5% Exam 1; 15% Exam 2; 15% Exam 3.

**Exam Format:** The exams are non-cumulative. The exam questions are *not* fill-in-the-blank or multiple-choice. Rather, they require short answers ranging from a sentence to a paragraph.

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**EPsy 3302 Introduction to Communication Skills for Educational and Community Settings**

OPT No Aud, 3 credit(s);

**Instructor:** Burke, Caroline Anne

**Description:** This course is designed to develop communication skills for persons who will work with diverse individuals or groups in educational and community settings. The emphasis is on practice in the use of communication skills, learning about communication concepts, and development of self-reflectivity regarding one's communication style. The major objective of this course is to enable persons to become more effective communicators with individuals and groups in educational and community settings. It is based on a premise that communication is a skill that can be learned. Therefore, the course will emphasize teaching and practicing basic skills
shown to be critical in working with people in human service professions.

**Style:** 30% Lecture, 40% Discussion, 30% Small Group Activities.

**EPsy 3303 Educational Psychology Undergraduate Research Practicum**

A-F only, 3 credit(s), max credits 6;
Instructor: McComas, Jennifer
Description: Student may contact the instructor or department for information.

**EPsy 5101 Intelligence and Creativity**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: EPSY 3101;
Instructor: Bart, William M
Description: This course is intended to serve students (graduate, undergraduate, and adult special) interested in intelligence and creativity. The course will feature an examination of theories of intelligence and creativity and perspectives on the assessment and development of intelligence and creativity. Implications for educational practices, psychological research, and the professions and disciplines will also be studied. Attention will be provided to the role of interventions intended to enhance intellectual abilities and creativity and to relevant brain research on creativity and intelligence. The primary readings for the course will be one contemporary paperback text on creativity and one contemporary paperback text on human intelligence. This course will emphasize writing in the evaluation of student performance. Students will work in small groups to complete approximately 7 group discussion short answer essay questions. Students will learn early in the course the essay questions to be used in the course. Each student will complete a critical review of one scholarly article or book chapter, with either the article or the text chapter to be selected by the student, and one final paper. The course will be "Web Enhanced."

**Style:** 30% Discussion, 20% Small Group Activities, 50% Web Based. presentations; web enhanced course (URL not yet available)

**Grading:** 25% mid exam, 20% final exam, 42% reports/papers, 10% special projects, 3% other evaluation.

**Exam Format:** short essay

**EPsy 5114 Psychology of Student Learning**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: EPSY 3301;
Instructor: Pellegrini, Anthony D
Description: Student may contact the instructor or department for information.

**EPsy 5115 Psychology of Adult Learning and Instruction**

3 credit(s);
Instructor: Tennyson, Robert D
Description: Student may contact the instructor or department for information.

**EPsy 5135 Human Relations Workshop**

4 credit(s);
Instructor: Pabon, Maria
Description: Student may contact the instructor or department for information.

**EPsy 5151 Cooperative Learning**

3 credit(s);
Instructor: Johnson, Roger T
Description: Student may contact the instructor or department for information.

**EPsy 5157 Social Psychology of Education**

A-F only, 3 credit(s);
Instructor: Maruyama, Geoffrey M
Description: Student may contact the instructor or department for information.

**EPsy 5216 Introduction to Research in Educational Psychology and Human Development**

A-F only, 3 credit(s);
Instructor: Pellegrini, Anthony D
EPsy 5221 Principles of Educational and Psychological Measurement
3 credit(s);
Instructor: Rodriguez, Michael C.
Description: Principles and methods in educational and psychological measurement. Specifically, the course will cover reliability, validity, item analysis, score interpretation; classical test theory, item response theory, and generalizability theory. Special attention will be given to the construction, interpretation, use, and evaluation of assessments regarding achievement, aptitude, interests, attitudes, personality, and exceptionality.
Style: 65% Lecture, 20% Discussion, 5% Laboratory, 10% Small Group Activities.
Grading: 20% mid exam, 30% reports/papers, 15% special projects, 35% laboratory evaluation.
Exam Format: Multiple choice, short answer, essay, output interpretation.

EPsy 5221 Principles of Educational and Psychological Measurement
3 credit(s);
Instructor: Davison, Mark L
Description: Student may contact the instructor or department for information.

EPsy 5243 Principles and Methods of Evaluation
3 credit(s); Credit will not be granted if credit has been received for: OLPD 5501;
Instructor: STAFF
Description: Introduction to program evaluation. Planning an evaluation study, collecting and analyzing information, reporting results; evaluation strategies; overview of the field of program evaluation.

EPsy 5244 Survey Design, Sampling, and Implementation
3 credit(s);
Instructor: Rodriguez, Michael C.
Description: In this course you will develop an understanding of basic survey research methods, particularly those that apply to educational settings with research applications in education and the social sciences. You will develop a practical understanding of the principles of sampling and data analysis. The course is taught from the theoretical basis of Social Exchange Theory and will include the review of state-of-the-art research on survey methods.
Style: 30% Lecture, 30% Discussion, 20% Laboratory, 20% Small Group Activities.
Grading: 100% special projects. Survey Project, sampling exercises

EPsy 5247 Qualitative Methods in Educational Psychology
3 credit(s);
Instructor: Lawrenz, Frances P
Description: Student may contact the instructor or department for information.

EPsy 5261 Introductory Statistical Methods
3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231;
Instructor: Everson, Michelle G
Description: This course is designed to provide an overview of introductory statistics. The topics to be covered in this course include graphing techniques, measures of center and spread, normal distributions, correlation, simple linear regression, sampling methods, experimental design, sampling distributions, and methods of statistical estimation and inference. Upon completion of this introductory course, students should be able to:(1) think critically about statistics used in popular magazines, newspapers, and journal articles, (2) apply the knowledge gained in the course to analyze simple statistics used in research, and (3) design a research study, use a statistical software package to analyze the data generated from this research study, and appropriately report the conclusions of this research study. Because this version will be conducted entirely online, it is important for all students to keep up with required readings and assignments. Students are also expected to be active participants in this course. Active participation includes asking and answering questions in assigned discussion groups, posting responses to assignments and discussion questions in discussion groups, and responding to the messages posted by other members of the class. Students will also be expected to use statistical software in the course. The instructor will provide students within information on the first day of class about the software that will be used and how to access this software.
Style: 100% Web Based. Class involves a lot of discussion/small-group activities and independent learning activities
Grading: 18% mid exam, 18% final exam, 18% reports/papers, 22% special projects, 21% written homework, 3% reflection paper.
Exam Format: mostly short-answer questions

EPsy 5261 Introductory Statistical Methods
3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231;
Instructor: Ziegler, Laura Ann
Description: Student may contact the instructor or department for information.

EPsy 5261 Introductory Statistical Methods
3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231;
Instructor: Le, Laura Jean
Description: Student may contact the instructor or department for information.

EPsy 5261 Introductory Statistical Methods
3 credit(s); Credit will not be granted if credit has been received for: EPSY 5231;
Instructor: Desjardins, Christopher David
Description: Student may contact the instructor or department for information.

EPsy 5262 Intermediate Statistical Methods
3 credit(s);
Instructor: Everson, Michelle G
Description: This course continues where EPSY 5261 (Introductory Statistical Methods) ends. Together, these two courses provide an alternative to the sequence EPSY 8261-8262. It is assumed that students who are registered in EPSY 5262 have successfully completed EPSY 5261 or its equivalent. By the end of the course, students should be able to: (1) understand the basic ideas and types of experimental design and analysis of variance (ANOVA), (2) run and interpret analyses involving real data using statistical software (SPSS), (3) decompose data based on different models, applying algebraic notation, (4) check assumptions for models and select appropriate models for data, and (5) complete an independent project where they design an experiment, gather data, analyze and interpret the data, and write up the results in a paper. The Fall 2012 section of 5262 will be offered completely online.
Style: 100% Web Based.
Grading: 19% mid exam, 19% final exam, 19% reports/papers, 22% written homework, 21% problem solving.
Exam Format: Mostly short answer questions

EPsy 5400 Special Topics in Counseling Psychology: Child and Adolescent Counseling Theory and Issues
2 credit(s), max credits 8, 8 completions allowed;
Instructor: Wahl, Kay Herting
Description: Student may contact the instructor or department for information.

EPsy 5461 Cross-Cultural Counseling
A-F only, 3 credit(s);
Instructor: Newton, Sandra M
Description: Student may contact the instructor or department for information.

EPsy 5604 Transition From School to Work and Community Living for Persons With Special Needs
3 credit(s);
Instructor: Peper, Christine R
Description: This course will emphasize the use and application of effective strategies and models for improving the transition of youth from school to work and community living for students aged 14-21. This will include course content that specifically addresses all phases of student assessment, individualized transition planning, parent, family and student involvement in designing post school options, use of appropriate community-based services (employment, residential living, social and recreational services, etc), and comprehensive interagency approaches for transition.
Style: 40% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.

EPsy 5609 Family-centered Services
A-F only, 2 credit(s);
Instructor: Watson, Christopher L
Description: Student may contact the instructor or department for information.

EPsy 5612 Understanding of Academic Disabilities
A-F only, 3 credit(s);
Instructor: Seifert PhD,Kathy
Description: Student may contact the instructor or department for information.

EPsy 5613 Foundations of Special Education I
A-F only, 3 credit(s);
Instructor: Markell,Marc A
Description: Student may contact the instructor or department for information.

EPsy 5613 Foundations of Special Education I
A-F only, 3 credit(s);
Instructor: Peper,Christine R
Description: The purpose of this course is to provide pre-service teachers with knowledge and skills needed to promote learning and success for all students, including those at risk for school failure and those with special needs. Students will be introduced to current research and issues emphasizing a collaborative problem solving approach that facilitates effective family-professional partnerships and educational programming for individuals with disabilities. Students will develop skills needed for planning and delivering the services necessary to productivity and inclusion of exceptional and diverse learners in school and community life.
Style: 30% Lecture, 30% Discussion, 20% Small Group Activities, 20% Student Presentation.

EPsy 5616 Behavior Analysis and Classroom Management
3 credit(s);
Instructor: Ticha,Renata
Description: Student may contact the instructor or department for information.

EPsy 5616 Behavior Analysis and Classroom Management
3 credit(s);
Instructor: Snidarich,Stephanie Marie
Description: Student may contact the instructor or department for information.

EPsy 5624 Biomedical and Physical Aspects of Developmental Disabilities
A-F only, 2 credit(s);
Instructor: Azar,Judi Larson
Description: In this course, we will cover various disabling conditions that affect children. We'll explore the genetic anamolies that can occur during gestational development, as well as conditions that can occur as a result of environmental toxins or maternal infections during a pregnancy. Students will study and report on a variety of potential birth defects that occur during the birth process or shortly after birth. We'll also briefly study pediatric pharmacology and neurological evaluations. Guest lecturers will include a Licensed School Nurse who will cover some of the medical conditions we see in the schools; and a Physical Therapist who will discuss the role of the therapist in the schools as well as proper positioning and transfering of students with various medical conditions and diagnoses. Students will be expected to make an on-site visit to a medical/rehabilitation facility to better understand the services offered there.

A-F only, 2 credit(s);
Instructor: Johnson,LeAnne Denise
Description: Student may contact the instructor or department for information.

EPsy 5636 Sensory Impairments of Learners With Intellectual Disabilities
2 credit(s);
Instructor: Hupp,Susan Candis
Description: This course is designed to address characteristics and learning needs of students with developmental disabilities who also have visual and auditory disabilities. We explore the nature of visual and auditory disabilities; the design of instructional programs to remediate or accommodate disabilities, including use of prosthetic devices; strategies to evaluate environments as they affect student performance, both school and nonschool, inside and outside; and related areas of performance affected by sensory impairments, such as communication. The course includes a project wherein students plan a method to evaluate a community-based environment for sensory demands, implement the evaluation, and share their findings with the class, in partnership with students in
EPsy 5624.

EPsy 5641 Foundations of Education for Individuals Who Are Deaf/Hard of Hearing
3 credit(s);
Instructor: Walker,Terry M.
Description: Student may contact the instructor or department for information.

EPsy 5644 Language Development and Programming for Deaf/Hard of Hearing Children
3 credit(s);
Instructor: Rose,Susan
Description: Student may contact the instructor or department for information.

EPsy 5647 Aural and Speech Programming for Persons Who Are Deaf/Hard of Hearing
3 credit(s);
Instructor: Paulson,Anna Regas
Description: Student may contact the instructor or department for information.

EPsy 5656 Social and Interpersonal Characteristics of Students with Disabilities
A-F only, 3 credit(s);
Instructor: STAFF
Description: The focus of this course is on the critical analysis of conceptual and practical issues regarding special education and students with emotional and behavioral disorders.
Style: 30% Lecture, 20% Discussion. Small group activities
Grading: 50% reports/papers, 30% quizzes, 5% in-class presentation, 15% class participation.

EPsy 5661 Introduction to Autism Spectrum Disorder
A-F only, 3 credit(s);
Instructor: Reichle,Joe E
Description: Student may contact the instructor or department for information.

EPsy 5702 Practicum in Autism Spectrum Disorder
A-F only, 3 credit(s);
Instructor: Reichle,Joe E
Description: Student may contact the instructor or department for information.

EPsy 5703 Practicum in Applied Behavior Analysis
A-F only, 3 credit(s);
Instructor: McComas,Jennifer
Description: Student may contact the instructor or department for information.

EPsy 5720 Special Topics: Special Education: Exceptionality in Schools and Communities
2 credit(s), max credits 12, 12 completions allowed;
Instructor: Seifert PhD,Kathy
Description: Student may contact the instructor or department for information.

EPsy 5751 Student Teaching: Deaf and Hard of Hearing
1-6 credit(s), max credits 10, 10 completions allowed;
Instructor: Paulson,Anna Regas
Description: Student may contact the instructor or department for information.

EPsy 5752 Student Teaching: Learning Disabilities
S-N only, 1-6 credit(s), max credits 10, 10 completions allowed;
Instructor: Seifert PhD,Kathy
Description: A higher level of understanding of specific learning disabilities will be the focus of this course. The transfer of theoretical knowledge to practical application learned throughout the students' program will be examined. Understanding of the role of the learning strategies specialist in resource and inclusive settings for students of elementary and secondary age is essential. Student teaching provides an opportunity to demonstrate competencies in teaching students with developmental disabilities that are outlined by the Minnesota Department of Education Board of Teaching and the University of Minnesota as requirements for the teaching license.
EPsy 5754 Student Teaching: Social and Emotional Disabilities
A-F only, 1-6 credit(s), max credits 8, 8 completions allowed;
Instructor: Kelley, Mary Beth
Description: Student may contact the instructor or department for information.

EPsy 5755 Student Teaching: Developmental Disabilities, Mild/Moderate
A-F only, 1-6 credit(s), max credits 6;
Instructor: Peper, Christine R
Description: The purpose of this two-semester sequence of Developmental Disabilities student teaching experiences is to provide student teachers with support and opportunities to demonstrate the following competencies from the MN Rules for Special Education: Developmental Disabilities. For a complete list of competencies addressed in this seminar, see attached Student Teaching Competencies for Licensure in Developmental Disabilities - Revised January 2004. a. To identify referral, assessment, planning, and placement procedures specific to teaching students with developmental disabilities. b. To use individual education program plans to design and implement appropriate instruction for students with developmental disabilities. c. To communicate and interact with students, families, colleagues, and the community to support student learning and well-being. d. To apply the standards of effective practice in teaching students with developmental disabilities through a variety of early and ongoing clinical experiences with kindergarten or primary, intermediate or middle level, and high school students across a range of service delivery models
Style: 25% Lecture, 75% Small Group Activities.

EPsy 5756 Student Teaching: Developmental Disabilities, Moderate/Severe
A-F only, 1-6 credit(s), max credits 6;
Instructor: Peper, Christine R
Description: The purpose of this two-semester sequence of Developmental Disabilities student teaching experiences is to provide student teachers with support and opportunities to demonstrate the following competencies from the MN Rules for Special Education: Developmental Disabilities. For a complete list of competencies addressed in this seminar, see attached Student Teaching Competencies for Licensure in Developmental Disabilities - Revised January 2004. a. To identify referral, assessment, planning, and placement procedures specific to teaching students with developmental disabilities. b. To use individual education program plans to design and implement appropriate instruction for students with developmental disabilities. c. To communicate and interact with students, families, colleagues, and the community to support student learning and well-being. d. To apply the standards of effective practice in teaching students with developmental disabilities through a variety of early and ongoing clinical experiences with kindergarten or primary, intermediate or middle level, and high school students across a range of service delivery models
Style: 25% Lecture, 75% Small Group Activities.

EPsy 5761 Student Teaching in Early Childhood Special Education Settings for Children Aged Three to Five Years
S-N only, 3 credit(s), max credits 6;
Instructor: Johnson, LeAnne Denise
Description: Students enrolled in this course are licensure candidates in the Early Childhood Special Education Licensure Program. This course fulfills requirements for the Early Childhood Special Education Age 3-5 portion of the Early Childhood Special Education license. Student teachers work closely with their cooperating teacher and University supervisor to design and implement appropriate programming for young children age 3-5 receiving special education services in preschool classrooms. A seminar accompanies this student teaching experience in which students engage in discussion and cooperative learning experiences. A small portion of the seminar utilizes a lecture format.

EPsy 5762 Student Teaching in Early Childhood Special Education for Children Aged Birth to Three Years
S-N only, 3 credit(s), max credits 6;
Instructor: Johnson, LeAnne Denise
Description: Students enrolled in this course are licensure candidates in the Early Childhood Special Education Licensure Program. This course fulfills student teaching requirements for the Early Childhood Special Education Age Birth to 3 portion of the Early Childhood Special Education license. Student teachers work closely with their cooperating teacher and University supervisor to design and implement appropriate programming for young children from Birth to Age 3 who are receiving special education services. A seminar accompanies this student teaching experience in which students engage in discussion and cooperative learning experiences. A small portion of the seminar utilizes a lecture format.

EPsy 5991 Independent Study in Educational Psychology
A-F only, 1-8 credit(s), max credits 20, 20 completions allowed;
Instructor: STAFF
Description:
EPsy 8114 Seminar: Cognition and Learning
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Tennyson, Robert D
Description: Student may contact the instructor or department for information.

EPsy 8114 Seminar: Cognition and Learning
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Varma, Sashank
Description: Mathematical Thinking Recent research in cognitive science is shedding new light on the long-standing question of how people understand mathematics. This course will provide a review of this research. We will read papers focusing on how adults, children, and non-human primates understand fundamental mathematical concepts such as number, arithmetic, and algebra. The papers will be drawn from psychology, neuroscience, and education, and will span a range of methods and populations. Graduate and advanced undergraduate students with an interest in mathematics are invited to register for the course, regardless of disciplinary background. For questions or more information, please contact Dr. Sashank Varma (sashank@umn.edu).
Style: 20% Lecture, 80% Student Presentation. In most classes, students will take turns presenting the articles we read. The instructor will present particularly difficult articles. In addition, there will be occasional demonstrations of phenomena.
Grading: 40% reports/papers, 10% attendance, 40% in-class presentation, 10% class participation. Students will take turns presenting papers and leading discussion. They will also write a final paper describing a literature review or pilot study they conduct.

EPsy 8114 Seminar: Cognition and Learning
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Varma, Keisha
Description: In this course, you will examine issues related to technology-enhanced instruction from a learning sciences perspective. We will look at how research in developmental, cognitive and educational psychology informs the way that technology-enhanced support is designed and implemented. We will read research papers concerned with the design and implementation of technology-based innovations. Throughout the semester, students will design and revise a curricular project that effectively integrates technology. Throughout the course, students will work collaboratively to reflect on issues of technology integration, learning and cognition. Each class meeting will include at least 1 hour of work in the computer lab.

EPsy 8215 Advanced Research Methodologies in Education
3 credit(s);
Instructor: Harwell, Michael R
Description: Student may contact the instructor or department for information.

EPsy 8216 Seminar: Research Processes in Psychological Foundations of Education
A-F only, 3 credit(s);
Instructor: Maruyama, Geoffrey M
Description: Student may contact the instructor or department for information.

EPsy 8220 Special Topics: Seminar in Quantitative Methods: Differential Item Functioning/Measure Invariance
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Davison, Mark L
Description: Student may contact the instructor or department for information.

EPsy 8251 Methods in Data Analysis for Educational Research I
3 credit(s);
Instructor: Harwell, Michael R
Description: Student may contact the instructor or department for information.

EPsy 8261 Statistical Methods I: Probability and Inference
3 credit(s);
Instructor: Zieffler PhD, Andrew S
Description: Student may contact the instructor or department for information.

EPsy 8261 Statistical Methods I: Probability and Inference
3 credit(s);
Instructor: Kohli, Nidhi
Description: Student may contact the instructor or department for information.
EPsy 8262 Statistical Methods II: Regression and the General Linear Model  
3 credit(s);  
Instructor: Zieffler PhD, Andrew S  
Description: Student may contact the instructor or department for information.

EPsy 8264 Advanced Multiple Regression Analysis  
3 credit(s);  
Instructor: Davenport Jr, Ernest C  
Description: Student may contact the instructor or department for information.

EPsy 8268 Hierarchical Linear Modeling in Educational Research  
3 credit(s);  
Instructor: Harwell, Michael R  
Description: Student may contact the instructor or department for information.

EPsy 8269 Matrix Algebra for Statistical Modeling  
2 credit(s);  
Instructor: Davenport Jr, Ernest C  
Description: Student may contact the instructor or department for information.

3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Garfield, Joan B  
Description: Student may contact the instructor or department for information.

EPsy 8281 Advanced Statistical Computing and Data Analysis  
3 credit(s);  
Instructor: Davenport Jr, Ernest C  
Description: Student may contact the instructor or department for information.

EPsy 8402 Individual Counseling: Theory and Applications  
A-F only, 3 credit(s);  
Instructor: Romano, John L  
Description: Student may contact the instructor or department for information.

EPsy 8406 Professional Ethics for Counselors and Psychologists  
A-F only, 3 credit(s);  
Instructor: Burke, Caroline Anne  
Description: Student may contact the instructor or department for information.

EPsy 8412 Seminar: Advanced Counseling Theory and Ethics  
A-F only, 4 credit(s);  
Instructor: Skovholt, Thomas M  
Description: Student may contact the instructor or department for information.

EPsy 8436 Crisis Management and Consulting in School Counseling  
A-F only, 3 credit(s);  
Instructor: Wahl, Kay Herting  
Description: Student may contact the instructor or department for information.

EPsy 8452 Psychological Aspects of Counseling Supervision  
3 credit(s);  
Instructor: Veach PhD, LP, Patricia McCarthy  
Description: Student may contact the instructor or department for information.

EPsy 8501 Counseling Pre-Practicum  
A-F only, 3 credit(s);
Instructor: Veach PhD,LP,Patricia McCarthy  
Description: Student may contact the instructor or department for information.

EPsy 8503 Counseling Practicum I  
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Skovholt,Thomas M  
Description: Student may contact the instructor or department for information.

EPsy 8503 Counseling Practicum I  
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Wahl,Kay Herting  
Description: Student may contact the instructor or department for information.

EPsy 8509 Supervision Practicum: CSPP  
1-2 credit(s), max credits 5, 5 completions allowed;  
Instructor: Veach PhD,LP,Patricia McCarthy  
Description: Student may contact the instructor or department for information.

EPsy 8509 Supervision Practicum: CSPP  
1-2 credit(s), max credits 5, 5 completions allowed;  
Instructor: Skovholt,Thomas M  
Description: Student may contact the instructor or department for information.

EPsy 8512 Internship: CSPP  
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;  
Instructor: Turner,Sherri L  
Description: Student may contact the instructor or department for information.

EPsy 8522 Counseling Practicum: Advanced  
A-F only, 3 credit(s), max credits 12, 4 completions allowed;  
Instructor: Romano,John L  
Description: Student may contact the instructor or department for information.

EPsy 8600 Special Topics: Special Education Issues: Research in Reading Difficulties and Disabilities  
3 credit(s), max credits 9, 9 completions allowed;  
Instructor: McMaster,Kristen Lee  
Description: Student may contact the instructor or department for information.

EPsy 8701 Doctoral Core Seminar: Special Education I  
A-F only, 3 credit(s), max credits 6;  
Instructor: Jitendra,Asha  
Description: Student may contact the instructor or department for information.

EPsy 8706 Single Case Designs in Intervention Research  
3 credit(s);  
Instructor: Symons,Frank J  
Description: Student may contact the instructor or department for information.

EPsy 8708 Functional Behavior Assessment  
A-F only, 3 credit(s);  
Instructor: McComas,Jennifer  
Description: Student may contact the instructor or department for information.

EPsy 8800 Special Topics in School Psychology: Seminar in Research in School Psychology  
1-3 credit(s), max credits 9, 9 completions allowed;  
Instructor: Christ,Theodore J  
Description: Student may contact the instructor or department for information.
EPsy 8811 Assessment in School Psychology I: Foundations of Academic Assessment  
A-F only, 3 credit(s);  
Instructor: Parker, David C  
Description: Student may contact the instructor or department for information.

EPsy 8813 Assessment Practicum in School Psychology  
A-F only, 2 credit(s), max credits 4;  
Instructor: Christ, Theodore J  
Description: Student may contact the instructor or department for information.

EPsy 8816 Individual and Systems Academic Interventions  
A-F only, 3 credit(s);  
Instructor: Burns, Matthew K  
Description: Student may contact the instructor or department for information.

EPsy 8818 Intervention Practicum in School Psychology  
A-F only, 1 credit(s), max credits 2;  
Instructor: Burns, Matthew K  
Description: Student may contact the instructor or department for information.

EPsy 8821 Issues in School Psychology  
A-F only, 3 credit(s);  
Instructor: Ysseldyke, James E  
Description: Student may contact the instructor or department for information.

EPsy 8831 Practicum: School Psychological Services  
1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Buerkle, Karla  
Description: Student may contact the instructor or department for information.

EPsy 8832 Clinical/Community Practice in School Psychology  
1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Buerkle, Karla  
Description: Student may contact the instructor or department for information.

EPsy 8841 Practicum: Instruction and Supervision in School Psychology  
A-F only, 2 credit(s), max credits 4;  
Instructor: Christ, Theodore J  
Description: Student may contact the instructor or department for information.

EPsy 8842 Internship: School Psychological Services  
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;  
Instructor: Hansen, Annie  
Description: Student may contact the instructor or department for information.

A-F only, 3 credit(s);  
Instructor: Christenson, Sandra L.  
Description: Student may contact the instructor or department for information.

Electrical and Computer Engineering  4-178 Kenneth H. Keller Hall

EE 1301 Introduction to Computing Systems  
4 credit(s);  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.
EE 2001 Introduction to Circuits and Electronics
   3 credit(s);
   Instructor: Wang, Jianping
   Description: Student may contact the instructor or department for information.

EE 2002 Introductory Circuits and Electronics Laboratory
   1 credit(s);
   Instructor: Robbins, William P
   Description: Student may contact the instructor or department for information.

EE 2006 Introductory Circuits Laboratory
   0.5 credit(s);
   Instructor: Robbins, William P
   Description: Student may contact the instructor or department for information.

EE 2011 Linear Systems, Circuits, and Electronics
   3 credit(s);
   Instructor: Ravindran, Niranjan
   Description: Student may contact the instructor or department for information.

EE 2101 Introduction to Electronics I
   1.5 credit(s);
   Instructor: Cohen, Philip I
   Description: Student may contact the instructor or department for information.

EE 2103 Introduction to Electronics II
   1 credit(s);
   Instructor: Cohen, Philip I
   Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
   4 credit(s);
   Instructor: Winstead PhD, Vincent
   Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
   4 credit(s);
   Instructor: Winstead PhD, Vincent
   Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
   4 credit(s);
   Instructor: Winstead PhD, Vincent
   Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
   4 credit(s);
   Instructor: Sapatnekar, Sachin Suresh
   Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
   4 credit(s);
   Instructor: Cherkassky, Vladimir S
   Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
   4 credit(s);
   Instructor: Sobelman, Gerald Edward
Description: Student may contact the instructor or department for information.

EE 2361 Introduction to Microcontrollers
4 credit(s);
Instructor: STAFF
Description: Computer organization, assembly language programming, arithmetic/logical operations, parallel/serial input/output. Microprocessor/microcontroller interfacing: memory design, exception handling, interrupts, using special-purpose features such as A/D converters, fuzzy logic, DSP operations. Integral lab.
Style: 50% Lecture, 15% Discussion, 35% Laboratory.
Grading: 15% mid exam, 40% final exam, 15% quizzes, 20% laboratory evaluation, 10% problem solving.
Exam Format: Solve problems

EE 3005 Fundamentals of Electrical Engineering
4 credit(s);
Instructor: Imbertson, Paul Jay
Description: Student may contact the instructor or department for information.

EE 3006 Fundamentals of Electrical Engineering Laboratory
1 credit(s);
Instructor: Mahmoodi PhD, Abolghassem B
Description: Student may contact the instructor or department for information.

EE 3015 Signals and Systems
3 credit(s);
Instructor: Ravindran, Niranjay
Description: Student may contact the instructor or department for information.

EE 3025 Statistical Methods in Electrical and Computer Engineering
3 credit(s);
Instructor: Gopinath, Anand
Description: Student may contact the instructor or department for information.

EE 3041 Industrial Assignment I
A-F only, 2 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 3101 Circuits and Electronics Laboratory I
2 credit(s);
Instructor: Koester, Steven J
Description: Student may contact the instructor or department for information.

EE 3102 Circuits and Electronics Laboratory II
2 credit(s);
Instructor: Koester, Steven J
Description: Student may contact the instructor or department for information.

EE 3115 Analog Electronics
3 credit(s);
Instructor: Robbins, William P
Description: Student may contact the instructor or department for information.

EE 3161 Semiconductor Devices
3 credit(s);
Instructor: Talghader, Joseph John
Description: Elementary semiconductor physics; physical description of pn junction diodes, bipolar junction transistors, field-effect transistors.
EE 3601 Transmission Lines, Fields, and Waves
3 credit(s);
Instructor: Franklin, Rhonda R.
Description: Student may contact the instructor or department for information.

EE 3990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 4;
Instructor: Leger, James Robert
Description: Student may contact the instructor or department for information.

EE 4043W Industrial Assignment II
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 4044 Industrial Assignment III
A-F only, 2 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 4231 Linear Control Systems: Designed by Input/Output Methods
3 credit(s);
Instructor: Seiler Jr, Peter J
Description: Student may contact the instructor or department for information.

EE 4235 Linear Control Systems Laboratory
1 credit(s);
Instructor: Georgiou, Tryphon T
Description: Lab to accompany 4231

EE 4301 Digital Design With Programmable Logic
4 credit(s);
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 4363 Computer Architecture and Machine Organization
4 credit(s); 2361 credit will not be granted if credit received for: 5361, CSci 5201; Credit will not be granted if credit has been received for: CSCI 4203;
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 4501 Communications Systems
3 credit(s);
Instructor: Ebbini, Emad S
Description: Student may contact the instructor or department for information.

EE 4505 Communications Systems Laboratory
1 credit(s);
Instructor: Ebbini, Emad S
Description: Student may contact the instructor or department for information.

EE 4541 Digital Signal Processing
3 credit(s);
Instructor: Parhi, Keshab K.
Description: Student may contact the instructor or department for information.

EE 4721 Introduction to Power System Analysis
3 credit(s);
Instructor: Wollenberg, Bruce F
Description: AC power systems; analysis of large power system networks; mathematics and techniques of power flow analysis, short circuit analysis, and transient stability analysis; use of a power system simulation program for design. Integral lab.

EE 4722 Power System Analysis Laboratory
1 credit(s);
Instructor: Wollenberg, Bruce F
Description: Student may contact the instructor or department for information.

EE 4741 Power Electronics
3 credit(s);
Instructor: Mohan, Ned
Description: This course is intended to provide a complete overview of Power Electronics that is an enabling technology for energy conservation and utilizing renewable energy resources. Topics include switch-mode DC Power Supplies; switch-mode Converters for DC and AC Motor Drives, Wind/Photovoltaic Inverters, interfacing power electronics equipment with Utility System; power semiconductor devices, magnetic design, etc. Associated with this course are PSpice-based examples and exercises. The textbook (less than 300 pages) is written specifically for such a course by the instructor; it can be purchased at a very low cost from the university bookstore. Totally as an option, students in this lecture course can opt to construct a dc-dc converter from a kit with surface-mount parts. Optional related hardware laboratory is EE 4743.

EE 4743 Switch-Mode Power Electronics Laboratory
1 credit(s);
Instructor: Mohan, Ned
Description: This hardware laboratory is intended to complement the lecture material in EE4741. It consists of hardware experiments on various switch-mode dc-dc converters without transformer isolation such as Buck, Boost and Buck-Boost converters. It also consists of dc-dc converters with transformer isolation, such as Flyback and Forward converters. One of the experiments requires design and implementation of a feedback control loop as in regulated dc power supplies.

EE 4951W Senior Design Project
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Ernie, Douglas
Description: Student may contact the instructor or department for information.

EE 4970 Directed Study
1-3 credit(s), max credits 3;
Instructor: STAFF
Description: Studies of approved projects, either theoretical or experimental.

EE 4981H Senior Honors Project I
2 credit(s);
Instructor: Lilja, David J
Description: Student may contact the instructor or department for information.

EE 5121 Transistor Device Modeling for Circuit Simulation
3 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 5163 Semiconductor Properties and Devices I
3 credit(s);
Instructor: STAFF
Description: Principles and properties of semiconductor devices. Selected topics in semiconductor materials, statistics, and transport. Aspects of transport in p-n junctions, heterojunctions.

EE 5171 Microelectronic Fabrication
4 credit(s);
Instructor: Campbell, Stephen A
Description: This course teaches the basic science and practical knowledge behind the fabrication of micro and nano structures.
Although the course uses integrated circuits as its primary teaching vehicle, the topics covered can be applied to many kinds of electrical, mechanical, optical, and magnetic structures. Specific processes covered include lithography, oxidation, etch, diffusion, chemical and physical vapor deposition, and epitaxial growth. The course also discusses the assembly of these unit processes to make various technologies including CMOS, thin film transistors, GaAs MESFET, light emitting diode and solid state lasers, solar cells, and MEMS. Extensive knowledge of the physics of the operation of these devices is not necessary.

Style: 100% Lecture.
Grading: 15% mid exam, 25% final exam, 15% reports/papers, 30% quizzes, 15% problem solving.
Exam Format: Problem Solving

EE 5173 Basic Microelectronics Laboratory
1 credit(s);
Instructor: Campbell, Stephen A
Description: Student may contact the instructor or department for information.

EE 5231 Linear Systems and Optimal Control
3 credit(s);
Instructor: Jovanovic, Mihailo
Description: Student may contact the instructor or department for information.

EE 5239 Introduction to Nonlinear Optimization
3 credit(s);
Instructor: Luo, Zhi-Quan
Description: Student may contact the instructor or department for information.

EE 5251 Optimal Filtering and Estimation
3 credit(s); [MATH 2243, STAT 3021] or equiv, CSE grad student or dept consent; 3025, 4231 recommended
Credit will not be granted if credit has been received for: AEM 5451
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

EE 5301 VLSI Design Automation I
3 credit(s);
Instructor: Bazargan, Kia
Description: Basic graph/numerical algorithms. VLSI Computer Aided Design algorithms (CAD), mostly physical design (partitioning, floorplanning, placement, and routing. Algorithms for high-level synthesis. Programming in C/C++ is a requirement.
Style: 80% Lecture. of the lecture time spent in class discussions
Grading: 25% mid exam, 25% final exam, 10% quizzes, 40% problem solving. A significant portion of homework is programming assignments.
Exam Format: open book

EE 5323 VLSI Design I
3 credit(s);
Instructor: Sobelman, Gerald Edward
Description: Student may contact the instructor or department for information.

EE 5333 Analog Integrated Circuit Design
3 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 5364 Advanced Computer Architecture
3 credit(s);
Instructor: Karpuzcu, Rahmet Ulya
Description: Student may contact the instructor or department for information.

EE 5371 Computer Systems Performance Measurement and Evaluation
3 credit(s); [4363 or 5361 or CSci 4203 or 5201], [CSE grad student] or dept consent
Credit will not be granted if credit has been received for: EE 5863;
Instructor: Lilja, David J
Description: The primary objective of this course is to teach computer designers and users the techniques for modeling computer systems and measuring their performance. These techniques are critical for evaluating new computer designs and for comparing existing systems. This course will concentrate on empirical, hands-on performance evaluation techniques using simulations and measurements of existing systems. An important aspect of this modeling and analysis is the presentation of measured data. In addition, the course will develop an understanding of how to use measured data to compare computer systems, and to determine how much a new architectural feature improves system performance. Course Objectives: - Learn to use appropriate statistical techniques to compare systems and interpret measured data. - Learn how to develop and apply measurement tools and techniques. - Learn how to use analytical modeling. - Learn how to appropriately design experiments. - Learn how to develop and use various types of simulations. - Learn to choose an appropriate performance evaluation technique.
Style: 95% Lecture, 5% Student Presentation.
Grading: 40% reports/papers, 25% quizzes, 25% written homework, 10% in-class presentation.

EE 5371 Computer Systems Performance Measurement and Evaluation
3 credit(s); [4363 or 5361 or CSci 4203 or 5201], [CSE grad student] or dept consent Credit will not be granted if credit has been received for: EE 5883;
Instructor: Tuohy, Bill
Description: The primary objective of this course is to teach computer designers and users the techniques for modeling computer systems and measuring their performance. These techniques are critical for evaluating new computer designs and for comparing existing systems. This course will concentrate on empirical, hands-on performance evaluation techniques using simulations and measurements of existing systems. An important aspect of this modeling and analysis is the presentation of measured data. In addition, the course will develop an understanding of how to use measured data to compare computer systems, and to determine how much a new architectural feature improves system performance. Course Objectives: - Learn to use appropriate statistical techniques to compare systems and interpret measured data. - Learn how to develop and apply measurement tools and techniques. - Learn how to use analytical modeling. - Learn how to appropriately design experiments. - Learn how to develop and use various types of simulations. - Learn to choose an appropriate performance evaluation technique.
Style: 95% Lecture, 5% Student Presentation.
Grading: 40% reports/papers, 25% quizzes, 25% written homework, 10% in-class presentation.

EE 5501 Digital Communication
3 credit(s);
Instructor: Sidiropoulos, Nikolaos
Description: Student may contact the instructor or department for information.

EE 5531 Probability and Stochastic Processes
3 credit(s);
Instructor: Haupt, Jarvis David
Description: Student may contact the instructor or department for information.

EE 5581 Information Theory and Coding
3 credit(s);
Instructor: Luo, Zhi-Quan
Description: Student may contact the instructor or department for information.

EE 5583 Error Control Coding
3 credit(s);
Instructor: Riedel, Marc
Description: Course Description: The theory of error correcting codes pertains to ways of introducing redundancy into digital representations of data. It underpins the success of modern digital communication and storage systems: it allows data to be sent at high speeds, with low power, in the presence of noise; it allows data to be stored reliably in unreliable memory systems. The theory is built on remarkably profound results in branches of mathematics such as abstract algebra and combinatorics. Like Gaul, the course is divided into three parts. - The first part will study the theory of coding, with considerable focus on the mathematical foundations. In particular, it will cover relevant topics from combinatorics such as sphere packing, lattices, and combinatorial designs. Also, it will focus on finite fields, building knowledge of the topic from the ground up. - The second part will study algorithmic aspect of coding, discussing efficient and practical algorithms for encoding and decoding. It will cover many standard codes, including cyclic codes, BCH and RS codes, convolution codes, LDPC codes, Turbo codes, and array codes. - The third part will explore applications of the theory, both to expected domains such as communications and storage, as well as to novel domains. Unique to the course, it will present preliminary research ideas on applying the theory of coding to logic synthesis.
Style: 100% Lecture.
Grading: 10% quizzes. There will be three exams, each work 30%; and three project each worth 30%. You may choose to write either exams or complete projects, or both. Your grade will consist of the three highest scores that you receive out of all six items.

EE 5616 Antenna Theory and Design
3 credit(s);
Instructor: Sainati, Robert A
Description: The intent of this course is to have the student develop an understanding of antennas and their place in communications systems. This includes a fundamental understanding of antenna operation, and exposure to the parameters used to characterize antennas, review of antenna analysis techniques and exposure to various antenna types such as wire antennas (dipoles, loops, helices, etc.), arrays, printed antennas and reflectors. The goals of this course are to provide the student with an intuitive understanding of how antennas operate and a background in the theory of antennas so that the student will be able to either effectively utilize antennas and/or continue with advanced studies of antennas. In addition, the course will provide practical information to allow for antenna design. Some introduction to antenna CAD tools will also be provided. Course grade will be based on scores achieved through homework assignments and two exams (mid-term and final).

EE 5624 Optical Electronics
4 credit(s);
Instructor: Li, Mo
Description: This course covers the fundamentals of modern photonics technology, including topics on optical wave propagation in mediums, guided wave theory, coupled mode theory, fiber optics, optical resonators, laser theory and devices, electro-optical and acousto-optical devices, integrated optics and nanophotonics. Prerequisite: electromagnetic theory at junior or senior level.
Style: 100% Lecture.
Grading: 20% mid exam, 30% final exam, 20% reports/papers, 30% written homework.

EE 5653 Physical Principles of Magnetic Materials
3 credit(s);
Instructor: Victora, Randall H
Description: Physics of para-magnetism, ferro-magnetism, antiferro-magnetism, ferrimagnetism, and associated ferromagnetic phenomena; static and dynamic theory of micromagnetics, magnetooptics, magnetization dynamics and magnetic material applications. Target audience is graduate students in a variety of fields, including electrical engineering, physics and materials science.
Style: 100% Lecture.
Grading: 15% mid exam, 30% final exam, 15% reports/papers, 40% problem solving.
Exam Format: Problem solution

EE 5940 Special Topics in Electrical Engineering I: Nano/Microfabrication and Characterization
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Stadler, Bethanie J. Hills
Description: Prereq: IT grad student or instr consent Description: This course covers the fabrication, characterization, and modern applications of thin films and nanostructures. Fabrication topics include vacuum technology, physical and chemical vapor deposition (CVD), and electrochemical deposition. The properties of resulting films are compared to each other and to bulk materials. Characterization techniques are reviewed. Finally, engineering the properties of films and nanostructures for applications in microfluidics, plasmonics, integrated photonics, nanoelectromechanical systems (NEMS), and nanoelectronics is important for optimized device performance. Therefore applications are the final topic taught and discussed as a summary of the course. A hands-on, team-based laboratory gives students experience with the fabrication techniques. The lab also exposes students to the facilities around campus so they will have a practical knowledge of specialized characterization. Each student completes a literature review, gives a presentation, and does a team lab report, all of which can be used towards the MSEE Plan C. Class Time: 60% Lecture, 40% Laboratory. Laboratory times may need to vary from course guide times depending on schedule of teaching assistant. Work Load: ~20 pages reading per week, ~50 pages writing per term, 0 exams, 1 papers, 1 presentations, 1 special projects, 7 homework assignments. Grade: 15% reports/papers, 40% written homework, 5% in-class presentation, 40% laboratory evaluation. Class work is individually graded, including a literature review project on topic of students choice. Laboratory is half individually graded and half a team grade. Instructor: Stadler, Bethanie J. Hills

EE 5940 Special Topics in Electrical Engineering I: Nano/Microfabrication and Characterization Lab
1 credit(s), max credits 12, 3 completions allowed;
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 5940 Special Topics in Electrical Engineering I
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Stadler, Bethanie J. Hills  
Description: Student may contact the instructor or department for information.

EE 5940 Special Topics in Electrical Engineering I  
2 credit(s), max credits 12, 3 completions allowed;  
Instructor: Mohan, Ned  
Description: Student may contact the instructor or department for information.

EE 5940 Special Topics in Electrical Engineering I: Wind Energy Essentials  
2 credit(s), max credits 12, 3 completions allowed;  
Instructor: Mohan, Ned  
Description: Student may contact the instructor or department for information.

EE 5940 Special Topics in Electrical Engineering I: Research in Data Storage and Storage Logistics  
1 credit(s), max credits 12, 3 completions allowed;  
Instructor: O'Keefe, Matthew Thomas  
Description: Student may contact the instructor or department for information.

EE 5940 Special Topics in Electrical Engineering I: Applied Parallel Programming  
3 credit(s), max credits 12, 3 completions allowed;  
Instructor: Sartori, John M  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Imbertson, Paul Jay  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Ernie, Douglas  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Mounes-Toussi, Farnaz  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Rennolet, Charles Leon  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Ottesen, Hal  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Zhang, Zhi-Li  
Description: Student may contact the instructor or department for information.
EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Gopinath, Anand
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Tewfik, Ahmed Hossam
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Instructor: Sapiro, Guillermo R
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Sapatnekar, Sachin Suresh
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Moon, Jaekyun
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Wollenberg, Bruce F
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Papanikolopoulos, Nikolaos P
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Parhi, Keshab K.
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Harjani, Ramesh
Description: Student may contact the instructor or department for information.
Instructor: Ruden, P Paul
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Kaveh, Mostafa
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Lilja, David J
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EE 5990 Curricular Practical Training
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Instructor: Mohan, Ned
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Talghader, Joseph John
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Cherkassky, Vladimir S
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Campbell, Stephen A
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Hubel, Allison
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Kinney, Larry L
Description: Student may contact the instructor or department for information.
EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Kieffer, John C
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Robbins, William P
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Instructor: Leger, James Robert
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Franklin, Rhonda R.
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Ebbini, Emad S
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Victora, Randall H
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Giannakis, Georgios B
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: He, Tian
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EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Bazargan, Kia
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Roychowdhury, Jaijeet
Description: Student may contact the instructor or department for information.
Instructor: Jacobs, Heinrich Otto Heiko  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Roumeliotis, Stergios  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Wang, Jianping  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Amin, Massoud  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Luo, Zhi-Quan  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: He, Bin  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Jindal, Nihar  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Kim, Chris H.  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Jovanovic, Mihailo  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Zhai, Antonia Bingheng  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Riedel, Marc  
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training  
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Oh, Sang-Hyun  
Description: Student may contact the instructor or department for information.
EE 5990 Curricular Practical Training
    S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
    Instructor: salapaka,murti v
    Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
    S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
    Instructor: Koester,Steven J
    Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
    S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
    Instructor: Haupt,Jarvis David
    Description: Student may contact the instructor or department for information.

EE 8320 Advanced Topics in Design Automation
    A-F only, 1-3 credit(s), max credits 12, 4 completions allowed;
    Instructor: Sapatnekar,Sachin Suresh
    Description: Student may contact the instructor or department for information.

EE 8500 Seminar: Communications
    S-N only, 1 credit(s), max credits 3, 3 completions allowed;
    Instructor: Giannakis,Georgios B
    Description: Student may contact the instructor or department for information.

EE 8591 Predictive Learning from Data
    3 credit(s);
    Instructor: Cherkassky,Vladimir S
    Description: COURSE DESCRIPTION: Methods for estimating dependencies from data have been traditionally explored in such
    diverse fields as: Statistics (multivariate regression and classification), Engineering (pattern recognition, system identification) and
    Computer Science (artificial intelligence, machine learning, data mining). Recent interest in learning methods triggered by the
    widespread use of computers and database technology has resulted in the development of biologically motivated methodologies, such
    as (artificial) neural networks, fuzzy systems and wavelets. Unfortunately, developments in each field are seldom related to other fields.
    Many data mining application lead to predictive learning methods, where available (historical) data is used to estimate models with high
    generalization capability (i.e., models capable of prediction or decision making with new data). This course will first provide general
    conceptual framework for learning dependencies from data, and then discuss predictive learning methods developed in statistics,
    pattern recognition and machine learning. COURSE PROJECTS: Each student is expected to complete a project (of research nature).
    A list of project topics will be distributed during 2-d week of class. Students will receive close supervision and feedback on their
    projects from the instructor. Students may propose their own project topic, subject to the instructor's approval. During the last week of
    class, students will give a short (~15 min) oral presentation of their project. TEXTBOOK: Learning from Data, by V. Cherkassky and F.

EE 8611 Plasma Physics
    3 credit(s);
    Instructor: Ernie,Douglas
    Description: Student may contact the instructor or department for information.

EE 8660 Seminar: Magnetics
    S-N only, 1 credit(s), max credits 3, 3 completions allowed;
    Instructor: Victora,Randall H
    Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
    1-3 credit(s), max credits 3, 1 completion allowed;
    Instructor: Imbertson,Paul Jay
    Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
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1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ernie, Douglas
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Mounes-Toussi, Farnaz
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Instructor: Rennolet, Charles Leon
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Instructor: Zhang, Zhi-Li
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Description: Student may contact the instructor or department for information.

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Instructor: Tewfik, Ahmed Hossam
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Instructor: Sapiro, Guillermo R
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Instructor: Sapatnekar, Sachin Suresh
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Instructor: Moon, Jaekyun
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Instructor: Posbergh, Thomas Alfred
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EE 8940 Special Investigations
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Instructor: Parhi,Keshab K.
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
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Instructor: Harjani,Ramesh
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EE 8940 Special Investigations
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Instructor: Cohen,Philip I
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Instructor: Ruden,P Paul
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EE 8940 Special Investigations
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Instructor: Georgiou,Tryphon T
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EE 8940 Special Investigations
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Instructor: Stadler,Bethanie J. Hills
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EE 8940 Special Investigations
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Instructor: Higman,Ted King
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Instructor: Mohan,Ned
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EE 8940 Special Investigations
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Instructor: Cherkassky, Vladimir S
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EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Holte, James Edward
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Instructor: Campbell, Stephen A
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Instructor: Bazargan,Kia
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
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Instructor: Roychowdhury,Jaijeet
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EE 8940 Special Investigations
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Instructor: Jacobs,Heinrich Otto Heiko
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EE 8940 Special Investigations
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Instructor: Roumeliotis,Stergios
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EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Wang,Jianping
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EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Amin,Massoud
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EE 8940 Special Investigations
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Instructor: Luo,Zhi-Quan
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EE 8940 Special Investigations
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Instructor: He,Bin
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EE 8940 Special Investigations
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Instructor: Jindal,Nihar
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EE 8940 Special Investigations
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Instructor: Kim,Chris H.
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Jovanovic,Mihailo
Description: Student may contact the instructor or department for information.
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Riedel, Marc
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Oh, Sang-Hyun
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Yoon, Euisik
Description: Student may contact the instructor or department for information.

EE 8940 Special Investigations
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Salapaka, Murti V
Description: Student may contact the instructor or department for information.

EE 8950 Advanced Topics in Electrical and Computer Engineering
1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Salapaka, Murti V
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Imbertson, Paul Jay
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Emie, Douglas
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Mounes-Toussi, Farnaz
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Rennolet, Charles Leon
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Ottesen, Hal
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Gopinath, Anand
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Tewfik, Ahmed Hossam
Description: Student may contact the instructor or department for information.
EE 8965 Plan C Project I
3 credit(s);
Instructor: Sapiro, Guillermo R
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Sapatnekar, Sachin Suresh
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Moon, Jaekyun
Description: Student may contact the instructor or department for information.

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Instructor: Wollenberg, Bruce F
Description: Student may contact the instructor or department for information.

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3 credit(s);
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Parhi, Keshab K.
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Harjani, Ramesh
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Cohen, Philip I
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Ruden, P Paul
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.
3 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Kaveh, Mostafa
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Lilja, David J
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Mohan, Ned
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Talghader, Joseph John
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Cherkassky, Vladimir S
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Holte, James Edward
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Campbell, Stephen A
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Hubel, Allison
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Kinney, Larry L
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Kieffer, John C
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Du, David Hung-Chang
Description: Student may contact the instructor or department for information.
EE 8965 Plan C Project I
3 credit(s);
Instructor: Robbins, William P
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Sobelman, Gerald Edward
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Leger, James Robert
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Franklin, Rhonda R.
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Ebbini, Emad S
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Victora, Randall H
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Giannakis, Georgios B
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Bazargan, Kia
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Roychowdhury, Jaijeet
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Jacobs, Heinrich Otto Heiko
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Roumeliotis, Stergios
Description: Student may contact the instructor or department for information.
EE 8965 Plan C Project I
3 credit(s);
Instructor: Wang, Jianping
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Amin, Massoud
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Luo, Zhi-Quan
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: He, Bin
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Jindal, Nihar
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Kim, Chris H.
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Jovanovic, Mihailo
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Zhai, Antonia Bingheng
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Riedel, Marc
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Oh, Sang-Hyun
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: salapaka, murti v
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.
EE 8965 Plan C Project I
3 credit(s);
Instructor: Haupt, Jarvis David
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Imbertson, Paul Jay
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ernie, Douglas
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Mounes-Toussi, Farnaz
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Rennolet, Charles Leon
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ottesen, Hal
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Gopinath, Anand
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Tewfik, Ahmed Hossam
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Sapiro, Guillermo R
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Sapatnekar, Sachin Suresh
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Moon, Jaekyun
Description: Student may contact the instructor or department for information.
EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Wollenberg, Bruce F
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Parhi, Keshab K.
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Harjani, Ramesh
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Cohen, Philip I
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ruden, P Paul
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Kaveh, Mostafa
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Lilja, David J
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Instructor: Oh, Sang-Hyun
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EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Yoon, Euisik
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Salapaka, Murti
Description: Student may contact the instructor or department for information.

EE 8970 Graduate Seminar I
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Ruden, P. Paul
Description: Student may contact the instructor or department for information.

Endodontics 15-209 MoosT

Endo 5305 Advanced Clinical Endodontics
A-F only, 1-6 credit(s), max credits 6;
Instructor: McClanahan, Scott B
Description: Student may contact the instructor or department for information.

Endo 5308 Advanced Clinical Endodontics
A-F only, 1-6 credit(s), max credits 6;
Instructor: McClanahan, Scott B
Description: Student may contact the instructor or department for information.

Endo 5312 Advanced Endodontic Emergency
S-N only, 1 credit(s);
Instructor: McClanahan, Scott B
Description: Student may contact the instructor or department for information.

Endo 5315 Advanced Endodontic Emergency
S-N only, 1 credit(s);
Instructor: McClanahan, Scott B
Description: Student may contact the instructor or department for information.
Endo 5329 Review of Cases  
A-F only, 1 credit(s);  
Instructor: McClanahan, Scott B  
Description: Student may contact the instructor or department for information.

Endo 5331 Review of Cases  
A-F only, 1 credit(s);  
Instructor: McClanahan, Scott B  
Description: Student may contact the instructor or department for information.

Endo 8001 Research in Endodontics  
1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Bowles, Walter Ray  
Description: Student may contact the instructor or department for information.

Endo 8004 Research in Endodontics  
1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: McClanahan, Scott B  
Description: Student may contact the instructor or department for information.

Endo 8310 Literature Review  
A-F only, 2 credit(s);  
Instructor: McClanahan, Scott B  
Description: Student may contact the instructor or department for information.

Endo 8312 Literature Review  
A-F only, 2 credit(s);  
Instructor: McClanahan, Scott B  
Description: Student may contact the instructor or department for information.

Endo 8320 Advanced Endodontic Lecture  
A-F only, 1 credit(s);  
Instructor: Bowles, Walter Ray  
Description: Student may contact the instructor or department for information.

Endo 8322 Advanced Endodontic Lecture  
A-F only, 1 credit(s);  
Instructor: Bowles, Walter Ray  
Description: Student may contact the instructor or department for information.

English as a Second Language  
160 McNamara Center

ESL 10 Beginning Grammar  
S-N only, 0 credit(s), 4 completions allowed;  
Instructor: STAFF  
Description: This course helps students develop English grammar skills by focusing on the meaning, form, and use of basic grammar structures. This course requires some prior English and is not for true beginners.  
Exam Format: Variety of formats including, multiple choice & short answer essay.

ESL 20 Beginning Reading and Composition  
S-N only, 0 credit(s), 4 completions allowed;  
Instructor: Kronick, Leah Claire  
Description: Student may contact the instructor or department for information.

ESL 30 Beginning Oral Skills  
S-N only, 0 credit(s), 4 completions allowed;  
Instructor: Khanzadi, Sara
Description: Student may contact the instructor or department for information.

ESL 110 High-Beginning Grammar
S-N only, 0 credit(s), 4 completions allowed;
Instructor: STAFF
Description: The course helps students refine and extend their skills in using basic grammar. The focus is on understanding and using fundamental grammatical structures at the sentence level. It includes topics such as verb tenses, questions, comparison, and article usage. Students study the use of word forms and grammatical structures in readings and conversations, practice in controlled speaking and writing exercises, and communicate with their classmates and teacher about topics of interest.

ESL 120 High-Beginning Reading and Composition
S-N only, 0 credit(s), 4 completions allowed;
Instructor: STAFF
Description: In this level 1 intensive reading and writing course for non-native speakers of English, students will improve reading comprehension by using strategies to identify the topic, main idea and details of adapted academic and general interest texts. Students will also choose books of interest to read for pleasure. In addition, students will develop informal and formal writing skills by writing weekly journal entries and four to five multi-draft papers of one or more paragraphs. In writing, students will work on developing content and organization as well as grammatical accuracy. Discussion and vocabulary development are included.
Exam Format: Short answer

ESL 130 High Beginning Oral Skills
S-N only, 0 credit(s), 3 completions allowed;
Instructor: STAFF
Description: The course focuses primarily on listening and speaking, with some reading, writing, and grammar. The text, which emphasizes high-frequency vocabulary and sentence patterns as they are used in real-life situations. Students will practice skills such as starting and maintaining a conversation and using "echo" questions to check information. The course will emphasize the active use of language, as students share information with classmates, using new skills and vocabulary.

ESL 210 Intermediate Grammar
S-N only, 0 credit(s), 4 completions allowed;
Instructor: STAFF
Description: The course helps students build on their skills in basic grammar, adding to their range and accuracy at the paragraph level. Topics are likely to include the present perfect tense, gerunds and infinitives, modals, and comparative and superlative forms. Students study the use of word forms and grammatical structures in readings and conversations, practice in controlled speaking and writing assignments, and communicate with their classmates and teacher about topics of interest.

ESL 220 Intermediate Reading and Composition
S-N only, 0 credit(s), 4 completions allowed;
Instructor: STAFF
Description: The purpose of this level 2 course is to help non-native speakers of English improve reading and writing skills in English. Students will read academic and non-academic texts about a variety of topics. Students will practice effective reading strategies as they read and discuss in class, and they will improve writing proficiency and strengthen grammar and vocabulary skills. In writing, students will work on topic sentences, paragraph and essay development and improving their accuracy in written English through informal writing, such as journals, and in more formal academic writing of multi-draft papers.

ESL 230 Intermediate Oral Skills
S-N only, 0 credit(s), 4 completions allowed;
Instructor: STAFF
Description: The text is organized around broad themes like global business, art, states of consciousness, and addictive substances. The course emphasizes listening and speaking equally, and the two skills are integrated: students will talk about what they have listened to. In listening, students work on broad skills such as understanding main ideas and narrower skills like distinguishing between similar-sounding words. In speaking, they work on such skills as conversation, asking questions to confirm understanding, and expressing opinions. There is some attention to pronunciation and vocabulary development. The course helps students with general everyday English, broadcast English, and academic English.
Style: 20% Lecture, 65% Discussion, 15% Laboratory.
Grading: 25% special projects, 15% quizzes, 25% in-class presentation, 25% class participation, 10% laboratory evaluation.
Exam Format: Short answers

ESL 310 Advanced Grammar
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** Chi, Julie Christine
**Description:** Student may contact the instructor or department for information.

**ESL 310 Advanced Grammar**
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** Nutting, Chelsea Ann
**Description:** Student may contact the instructor or department for information.

**ESL 320 Advanced Reading and Composition**
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** STAFF
**Description:** ESL 621 is a Level 3 intensive reading and writing course for non-native speakers of English. Students will practice reading skills including skimming, scanning, previewing, predicting content, making inferences, and distinguishing fact from opinion. Students will practice writing skills including paraphrasing and summarizing, editing and proofreading their own and others' work, and selecting and incorporating sources. Students will learn to employ a process approach to writing, and will progress from developing paragraphs to developing academic essays employing appropriate rhetorical modes.

**ESL 330 Advanced Oral Skills**
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** STAFF
**Description:** The text is organized around themes of business, media studies, science, psychology, and art & design. Students will listen to academic lectures, take notes and discuss the lectures. The course also supplies help with the academic language to expect and use in these situations. There may be additional work with pronunciation. Students may do individual and group presentations on related topics.

**ESL 410 English Grammar for Academic Purposes**
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** STAFF
**Description:** This course focuses on increasing students' accuracy and range in English grammar. Topics that are especially relevant to academic writing, such as conciseness and smooth connections between sentences, are emphasized. Among the traditional topics of grammar, these are likely to be included: subordination, coordination, and transition expressions; tense, aspect, and associated adverbials; gerunds, infinitives, and other types of complementation; and lexical grammar—the grammar associated with individual words. Activities and regular assignments improve students' ability to analyze grammar, including their own mistakes, and to use grammar more effectively.

**ESL 420 High Advanced Reading/Composition**
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** STAFF
**Description:** ESL 721 is a Level 4 course for non-native speakers of English that builds and refines advanced-level reading, writing, and critical thinking skills including audience awareness and incorporating sources. In this course students will read essays and articles on a variety of topics from multiple sources. Students will improve their ability to identify main ideas and details, analyze and critique support, and respond with their own ideas in writing and discussion. Students will write three multi-draft papers: a personal experience essay, an argumentative essay, and a research report. Students will also develop informal writing skills.
**Exam Format:** Variety

**ESL 430 High Advanced Oral Skills**
S-N only, 0 credit(s), 4 completions allowed;
**Instructor:** STAFF
**Description:** The textbook is organized around topics of anthropology, economics, literature and ecology and uses a variety of styles (social language, broadcast English, and academic English). This course focuses on increasing students' listening and speaking skills including some pronunciation and academic note-taking. Students may do individual and group presentations on related topics.

**ESL 900 Current Issues in the Media**
S-N only, 0 credit(s), 10 completions allowed;
**Instructor:** STAFF
**Description:** This course is open to full-time or part-time students in the Intensive English Program (IEP) at level 3 or above. Current Issues in the Media is an integrated-skills class with an emphasis on reading, vocabulary enrichment, and discussion. The goal of this course is to help students improve their ability to read in English, especially authentic media material, and to understand, discuss,
analyze, and think critically about issues in the media. Students develop vocabulary and provide oral and written responses to media topics in English.

ESL 902 Academic Skills for the American University
S-N only, 0 credit(s), 10 completions allowed;
Instructor: Scully, Patrick Edwin
Description: Student may contact the instructor or department for information.

ESL 902 Academic Skills for the American University
S-N only, 0 credit(s), 10 completions allowed;
Instructor: Gill, Jonathan Richard
Description: Student may contact the instructor or department for information.

ESL 903 Business English
S-N only, 0 credit(s), 10 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

ESL 904 TOEFL Preparation
S-N only, 0 credit(s);
Instructor: STAFF
Description: Learn important test-taking skills in preparation for taking the internet-based Test of English as a Foreign Language (TOEFL iBT). Intensive review of the four skills assessed on this exam: reading, written expression, listening, and speaking. While this course focuses on the TOEFL (iBT), the test taking skills and language review covered in this course would also be useful if you are preparing to take the paper-based TOEFL, IELTS, or MELAB exams.

ESL 921 Academic Writing
S-N only, 0 credit(s), 3 completions allowed;
Instructor: STAFF
Description: ESL 781 is a course for non-native speakers of English that teaches students how to recognize and use different patterns of development in writing (such as narration, exemplification, and cause and effect) to deepen and extend ideas in various types of academic writing tasks. Guided textual analyses of readings are used to stimulate classroom discussions of shared topics and to support developing writing skills through close observation of rhetorical strategies employed by accomplished writers. Typical assignments include argumentative essays, reviews or opinion essays, short research papers, and possible independent assignments based on the specific needs of individual students.

ESL 931 Academic Speaking
S-N only, 0 credit(s), 3 completions allowed;
Instructor: STAFF
Description: An advanced course for non-native speakers who want to improve their communication skills for social, academic and professional purposes; emphasis is on listening and speaking; content is drawn from the mass media.
Style: 25% Lecture, 45% Discussion. Small group work
Grading: 10% mid exam, 10% final exam, 25% special projects, 25% in-class presentation, 25% class participation, 5% laboratory evaluation.
Exam Format: Variety

ESL 941 Research Writing for the American University
S-N only, 0 credit(s);
Instructor: Ruesch, Alyssa Marie
Description: Student may contact the instructor or department for information.

ESL 951 Pronunciation
S-N only, 0 credit(s);
Instructor: Ackerberg, Lynne B
Description: Student may contact the instructor or department for information.

ESL 3001 Integrated Skills for Academic English
2 credit(s), max credits 4;
Instructor: STAFF
Description: This course will help non-native English speaking students in degree programs polish their English skills in order to be successful in university level classes. Topics will cover the English language needed to interact within university setting, academic life, student/instructor roles, communicating by email, classroom interactions, discussion/panel presentation skills.

ESL 3101 Advanced English Grammar
4 credit(s), max credits 8;
Instructor: STAFF
Description: This course for academic credit is designed for students already enrolled in degree programs at the University of Minnesota to work on polishing their English skills. Students review and solidify their understanding and control of English grammar in writing and speaking. The focus is on grammar in context at the multi-paragraph level. Topics include verb tenses, noun clauses, the passive voice, conditionals, and adjective clauses. This knowledge is applied to development of revision and editing skills in the writing process. Written assignments and oral practice help students communicate their ideas more accurately and confidently.

ESL 3102 English Grammar for Academic Purposes
4 credit(s), max credits 8;
Instructor: STAFF
Description: This course for academic credit is designed for students already enrolled in degree programs at the University of Minnesota to work on polishing their English skills and builds on the concepts covered in ESL 3101. This course focuses on increasing students' accuracy and range in English grammar. Topics that are especially relevant to academic writing, such as conciseness and smooth connections between sentences, are emphasized. Among the traditional topics of grammar, these are likely to be included: subordination, coordination, and transition expressions; tense, aspect, and associated adverbials; gerunds, infinitives, and other types of complementation; and lexical grammar—the grammar associated with individual words. Activities and regular assignments improve students' ability to analyze grammar, including their own mistakes, and to use grammar more effectively.

ESL 3102 English Grammar for Academic Purposes
4 credit(s), max credits 8;
Instructor: Nelson,Eric Stuart
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit the Class URL for ODL policies, including fee and financial aid information. This course will help you increase your accuracy and range in English grammar. Topics that are especially relevant to academic writing, such as conciseness and smooth connections between sentences, are emphasized. Activities and regular assignments will improve your ability to analyze grammar, including your own mistakes, and to use grammar more effectively. Expect two hours preparation time for each hour of class.
Style: Online with in-person, handwritten exam
Grading: 45%: Exams and Practice Quizzes 40%: Writing Assignments 15%: Participation in Discussions
Exam Format: Final exam is proctored, in-person.

ESL 3201 Advanced English Reading and Composition
5 credit(s), max credits 10;
Instructor: STAFF
Description: This is an intensive reading and writing course for non-native speakers of English who are studying in degree programs at the University of Minnesota. Students will practice reading skills including skimming, scanning, previewing, predicting content, making inferences, and distinguishing fact from opinion. Students will practice writing skills including paraphrasing and summarizing, editing and proofreading their own and others' work, and selecting and incorporating sources. Students will learn to employ a process approach to writing, and will progress from developing paragraphs to developing academic essays employing appropriate rhetorical modes.

ESL 3202 Academic Reading and Composition
5 credit(s), max credits 10;
Instructor: STAFF
Description: This is a course for advanced non-native speakers of English who are enrolled in university degree programs that builds and refines advanced-level reading, writing, and critical thinking skills including audience awareness and incorporating sources. In this course students will read essays and articles on a variety of topics from multiple sources. Students will improve their ability to identify main ideas and details, analyze and critique support, and respond with their own ideas in writing and discussion. Students will write three multi-draft papers: a personal experience essay, an argumentative essay, and a research report. Students will also develop informal writing skills needed in academic settings.

ESL 3302 Writing for Academic Purposes
4 credit(s), max credits 8;
Instructor: STAFF
Description: This is a course for non-native speakers of English who are in university degree programs that builds and refines advanced-level reading, writing, and critical thinking skills including audience awareness and incorporating sources. In this course students will read essays and articles on a variety of topics from multiple sources. Students will improve their ability to identify main ideas and details, analyze and critique support, and respond with their own ideas in writing and discussion. Students will write three multi-draft papers: a personal experience essay, an argumentative essay, and a research report. Students will also develop informal writing skills.

ESL 3402 Research Writing for the American University
4 credit(s), max credits 8;
Instructor: STAFF
Description: This course enables students to develop the methods of citation, conventions of style and organization, and critical thinking skills necessary for writing college-level research papers. Students select topics derived from a contemporary academic theme provided by the instructor and, applying a process approach, produce a research paper. Students will learn to use the library effectively. Problems with structure and vocabulary usage are addressed individually.

ESL 3501 Advanced English Listening and Speaking
5 credit(s), max credits 10;
Instructor: STAFF
Description: This course for academic credit is designed for students already enrolled in degree programs at the University of Minnesota to work on improving their English listening and speaking skills in order to be more successful in their coursework. The course focuses on understanding academic lectures and discussions as well as participating in classroom discussions, asking questions of instructors and peers, and giving academic presentations.

ESL 3502 Academic Listening and Speaking
5 credit(s), max credits 10;
Instructor: STAFF
Description: This course for academic credit is designed for students already enrolled in degree programs at the University of Minnesota to work on polishing their English listening and speaking skills. The course focuses on understanding academic lectures and discussions as well as participating in classroom discussions, asking questions of instructors and peers, and giving academic presentations.

ESL 3551 English Pronunciation
4 credit(s), max credits 8;
Instructor: STAFF
Description: This 4 credit course is designed for advanced non-native English speaking students who want to polish their pronunciation skills in English. In order to improve your ability to understand and pronounce English, a variety of areas of pronunciation will be covered while paying special attention to whatever is most difficult for you. Students will also be equipped with techniques to practice pronunciation improvement on their own. Topics covered include English sounds (individually and in combination with other sounds), word stress, sentence stress, rhythm, intonation, linking, understanding fast speech, pronunciation and spelling connections. Open to graduate and undergraduate students, visiting scholars, and members of the community with advanced English skills or above. Check with the Minnesota English Language Program for more information 612-624-1503.

ESL 3602 Speaking for Academic Purposes
4 credit(s), max credits 8;
Instructor: STAFF
Description: The goal of this course is to help non-native speakers of English who are already at the advanced level develop the skills needed to participate in American academic interactions at the university level of various types: presentations, group presentations, seminar-style discussions, and informal exchanges. In this class, you will participate in activities to help you present yourself professionally and socially in collegial settings with accuracy, variety, and flexibility. You will learn to organize and outline academic presentations, present information clearly and effectively, explain concepts and processes from your academic field to outsiders, involve audience members and respond to questions, and monitor and improve your spoken fluency, grammar and pronunciation.

ESL 3900 Special Topics in ESL
1-5 credit(s), max credits 10;
Instructor: STAFF
Description: Special topics course open to students enrolled in special programs at the Minnesota English Language Program (MELP).
English: Literature

EngL 1001V Introduction to Literature: Poetry, Drama, Narrative
A-F only, 4 credit(s); Honors or instr consent credit will not be granted if credit already received for: ENGL 1001, 1002
Credit will not be granted if credit has been received for: ENGL 1001W; Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Goldberg, Brian B
Description: Introduction to Literature introduces students to the study of literature at the college level. Students explore different literary genres, including short fiction, poetry, and drama, from various time periods and cultures. Students are asked to read selected poems, stories, novels, and plays carefully, to think about them and the issues they raise, to discuss them in class, and to write critical essays about them.
Style: 50% Lecture, 50% Discussion.
Grading: 15% mid exam, 15% final exam, 40% reports/papers, 15% written homework, 15% class participation.

EngL 1001W Introduction to Literature: Poetry, Drama, Narrative
4 credit(s); credit will not be granted if credit already received for: ENGL 1001, 1002
Credit will not be granted if credit has been received for: ENGL 1001V; Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Licht, Melissa Vera
Description: Student may contact the instructor or department for information.

EngL 1181W Introduction to Shakespeare
4 credit(s); credit will not be granted if credit already received for: ENGL 1181, 1182
Credit will not be granted if credit has been received for: ENGL 1181V; Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Clayton, Tom
Description: Shakespeare is deep in many ways, but he is also funny, as is the instructor, and as you are encouraged to be when you know what you are talking about. Unlike you, Shakespeare hadn't the benefit of "writing-enriched" courses, but he did all right, as you will read for yourself. The language may seem remote on first acquaintance, but it comes readily into focus, clarity, and color for most who are willing to make the effort and ready to be rewarded evermore. Hamlet is able to speculate perennially on whether "To be or not to be" and "Whether 'tis nobler in the mind to suffer / The slings and arrows of outrageous fortune, / Or to take arms against a sea of troubles / And by opposing end them" (3.1.56-61), because he is immortal. And he is immortal because his creator was born an imaginative genius with a vocation to playwrighting in an age when much of his world was a stage and a multicultural and hugely expressive Early Modern English was evolving. This language enabled the making of a literature and drama of extraordinary richness, philosophical and social complexity, depth of perception, psychological insight, and even global vision. Shakespeare is read and performed everywhere, and has been especially powerful in Russian and Japanese films, for example. His gift for creating dramatic actions extravagant, disturbing, funny, profound, and searching by turns (often several at once) was complemented by a verbal gift of range and wit, the sine qua non, whether Hamlet, Ophelia, Polonius, or a gravedigger speaks. 7-8 representative plays, with attention to contemporary contexts and antecedents, continuing social relevance, and some recent productions, and with primary emphasis on understanding Shakespeare's text in its habit as it lives. Do the work conscientiously, and you will reap the rewards. Don't, and expect negative consequences.
Style: 70% Lecture, 25% Discussion, 5% Small Group Activities.
Grading: 15% mid exam, 35% final exam, 35% reports/papers, 15% quizzes.
Exam Format: Some objective questions but substantially essay, typically including analysis of passages, comparison and contrast, and synthesis.

EngL 1301W Introduction to Multicultural Literatures of the United States
4 credit(s); credit will not be granted if credit already received for: ENGL 1301, 1302
Credit will not be granted if credit has been received for: ENGL 1301V; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: STAFF
Description: There can never been one single voice for the American experience, an idea that is illuminated through a study of American multicultural literature. How have African Americans, Latinos/as, Native Americans, and immigrants told of their experiences? How has the struggle for equality found its voice in novels, plays, and testimonies? How does literature both embrace and resist the dominant culture? These questions are answered in diverse ways by such authors as W.E.B. DuBois, Frederick Douglass, Joy Kogawa, Leslie Marmon Silko, and many others.

EngL 1401W Introduction to "Third World" Literatures in English
4 credit(s); credit will not be granted if credit already received for: ENGL 1401, 1402
Credit will not be granted if credit has been received for: ENGL 1401V; Meets CLE req of Global Perspectives; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Colonialism, emigration, economics, war, famine, and slavery have worked in combination to make English a language spoken in almost every region of the world. The legacy of these forces is an international Anglophone literature that addresses issues such as displacement and difference, representation, poverty, nationalism, syncretism, and the fight for freedom. The voices that speak to these issues are varied and impressive and students will engage closely and critically with texts of multiple genres from Anglophone Africa, South Asia, and the Caribbean, discovering how the tools of oppression can be used strategically to dismantle the "master's house" and build other houses in its stead. This course will introduce questions raised by the interaction of the "First" and "Third" worlds and create, inevitably, questions about history, politics, social science, and how language operates in the so-called "Third World."

EngL 1501W Literature of Public Life
A-F only, 4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: STAFF
Description: How has American literature addressed what it means to be a citizen? English 1501 examines literature written with the intent to leave an impression: works that have stunned, mobilized, stimulated, and galvanized the American public. The course is dialectical, setting diverse works against one another to form a dialogue that extends across chronological, geographic, and racial boundaries. "Literature" is defined broadly to include novels, speeches, essays, testimonies, sermons, plays, music, photography, and film. Recent readings have included Uncle Tom's Cabin, Maggie: A Girl of the Streets, The Souls of Black Folk, Twilight: Los Angeles, 1992, and Nickel and Dimed: On (Not) Getting By in America. This course doesn't sit on the shelf: it will ask students to examine and engage with the world around them.

EngL 1701 Modern Fiction
3 credit(s); Credit will not be granted if credit has been received for: ENGL 1701H; Meets CLE req of Literature
Instructor: Fitzgerald, M. J
Description: This class will introduce you to some of the most important writers of the last one hundred. The lectures will be divided into three units: Contemporary (1980 to the present), Modern (1940-80) and Modernist (1900-1940). We will read and talk about three novels from each period, including Morrison, Coetzee, Nabokov, Pynchon, Munro as well as Faulkner, Woolf and Joyce. The intention of this class is to make you fall in love with reading in all its variety. If you already are in love, join us anyway, and help to inspire those who resist one of the greatest pleasures in life.
Style: 25% Lecture, 50% Discussion. I hope to have conversations between myself and the TAs, between the TAs, and between myself, the TAs and the students.
Grading: 5% reports/papers, 20% special projects, 10% quizzes, 20% in-class presentation, 20% class participation, 25% problem solving. This is how I envisage it at the moment, but the balance my change a little between these five areas when I actually make up the syllabus.

EngL 1701 Modern Fiction
3 credit(s); Credit will not be granted if credit has been received for: ENGL 1701H; Meets CLE req of Literature
Instructor: Hughes, Joseph P
Description: Student may contact the instructor or department for information.

EngL 1701 Modern Fiction
3 credit(s); Credit will not be granted if credit has been received for: ENGL 1701H; Meets CLE req of Literature
Instructor: Calder, Simon Richard
Description: Student may contact the instructor or department for information.

EngL 1905 Topics: Freshman Seminar: The Wilde Nineties
A-F only, 3 credit(s);
Instructor: Cucullu, Lois B
Description: "Wilde Nineties! " Oscar Wilde's name is forever linked with the closing decade of the 19th c. Remembered as one of the most dynamic, this decade witnessed great technological innovation and cultural change, everything from the opening of cinemas, the discovery of ex-rays, and the invention of the indispensable zipper to ragtime music, the revolution in women's fashion, and the keen anxiety over decadence and the sex question. Opening with Wilde's celebrity and closing with the scandal surrounding his trials, imprisonment, and death, the decade also witnessed an enormous interest in science and the occult, evident in such fictions as The Time Machine, Sherlock Holmes, and Dracula, not to overlook Wilde's own The Picture of Dorian Gray. This course aims at a "slice of life" across the 1890s to better understand the enormous shifts in the literary, material, scientific, and technological culture that reverberate down to the present moment.
Style: 25% Lecture, 5% Film/Video, 55% Discussion, 10% Small Group Activities, 5% Web Based.

EngL 1910W Topics: Freshman Seminar: Hip Hop as Academic Inquiry
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Sirc, Geoffrey Michael  
Description: Yo, yo, yo, what's up with rap music? Social blight or great art? Are the haters right or does hip hop keep it real? For that matter, just what does hip hop mean by 'real'? Is 50 Cent's 'real' the same as Talib Kweli's? And where did hip hop even come from? In this course, we'll take a VERY close look at hip hop, and as we do so, we'll learn how academic inquiry works at the University. Hip Hop is an exceptionally fruitful topic for scholarly study in the way it offers a variety of research 'portals': not just the aesthetics of beats and rhymes, but issues of race, gender, sexuality, economics, marketing, fashion, violence, media representation, the history of American popular culture, and a host of others. We'll get our research on and read, write, listen, and watch our way to bangin' critical insight.

EngL 3001W Textual Analysis: Methods  
A-F only, 4 credit(s); English major or minor or premajor or BIS/IDIM-English credit will not be granted if credit already received for: ENGL 3001, 3801  
Credit will not be granted if credit has been received for: ENGL 3001V; Meets CLE req of Writing Intensive  
Instructor: Sirc, Geoffrey Michael  
Description: Student may contact the instructor or department for information.

EngL 3001W Textual Analysis: Methods  
A-F only, 4 credit(s); English major or minor or premajor or BIS/IDIM-English credit will not be granted if credit already received for: ENGL 3001, 3801  
Credit will not be granted if credit has been received for: ENGL 3001V; Meets CLE req of Writing Intensive  
Instructor: Lindberg, Adam Douglas  
Description: Student may contact the instructor or department for information.

EngL 3001W Textual Analysis: Methods  
A-F only, 4 credit(s); English major or minor or premajor or BIS/IDIM-English credit will not be granted if credit already received for: ENGL 3001, 3801  
Credit will not be granted if credit has been received for: ENGL 3001V; Meets CLE req of Writing Intensive  
Instructor: Sugnet, Charles J  
Description: The class will start with portions of Terry Eagleton's very readable Literary Theory, together with excerpts from Gauri Viswanathan and others, to familiarize students with the major contemporary schools of thought about what "literature" is for and how texts should be read. We will then read several works, probably including Shakespeare's "The Tempest", Aime Cesaire's 1960 rewrite "A Tempest", and J.M. Coetzee's "Foe" (a South African revision of both "Robinson Crusoe" and "The Tempest"). The notion of "literature" will also be broadened and challenged by attention to recorded "dub" poetry, cinema, and video. Writing assignments will consist of a series of shorter papers rather than a single long paper at the end.

EngL 3002 Modern Literary Criticism and Theory  
3 credit(s); Credit will not be granted if credit already received for: EngL 3802  
Instructor: Ismail, Qadri M  
Description: Theory is about thinking in the abstract. Or, in other words, about the usefulness of concepts. This class will focus on understanding some concepts critical to the study of literature. Some - like plot, character, narrative - are very old. Others - like the subject, agency, class, history, culture, literature itself - emerged with the enlightenment. Still others - like the unconscious, text, discourse, interpellation, difference - emerged in opposition to the concepts of the enlightenment. We will examine as many as possible, but the focus of the class will be on the cardinal categories of what has become known as post-structuralism. We will read Althusser, Aristotle, Barthes, Chatterjee, Derrida, Foucault, Freud, Hegel, Nietzsche, Spivak, and others.

EngL 3002 Modern Literary Criticism and Theory  
3 credit(s); Credit will not be granted if credit already received for: EngL 3802  
Instructor: Hughes, Joseph P  
Description: Student may contact the instructor or department for information.
EngL 3003W Historical Survey of British Literatures I
4 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course, the first in the Survey of British Literature series, introduces students to the literature of the British Isles from the Anglo-Saxon period to the eighteenth century. This broad sweep through time covers the Medieval period, the Renaissance (or, Early Modern Age), Civil Wars, Restoration, and the Enlightenment and provides a fascinating variety of works in a multitude of genres including poetry, drama, plays, novels, essays, autobiography, and speeches. Students will read authors such as Milton, Chaucer, Spenser, Marlowe, and Defoe, as well as lesser-known writers, thus gaining a more complete understanding of the literature of these periods. Because artistic expression is affected and informed by historical circumstances, texts are placed within their historical moments and considered in terms of their social, political, biographical, and economical contexts and close reading is used to connect features of the texts to their culture in order to gain a greater understanding of both. This course is demanding in its reading and writing requirements, but the variety and complexity of human experiences presented here affords great opportunity for stimulating discussion and thoughtful writing.

EngL 3004W Historical Survey of British Literatures II
4 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: McNaron,Toni A
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Engl 3004W covers the period from the late eighteenth century to recent times. You may have enrolled in this course after having taken Engl 3003W, or you may want simply to read such major writers as William Wordsworth, John Keats, Charles Dickens, Alfred Tennyson, Elizabeth Barrett Browning and Robert Browning, D. H. Lawrence, Virginia Woolf, Joseph Conrad, T. S. Eliot, and W. H. Auden, as well as some of their contemporaries and successors. Either way, you are encouraged to enjoy the experience, considering at every stage the ways in which this literature is relevant to us today.
Style: Printed, correspondence section.
Grading: 20% final exam, 80% written homework.
EngL 3005W Survey of American Literatures and Cultures I
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Kim, Na-Rae
Description: Student may contact the instructor or department for information.

EngL 3006W Survey of American Literatures and Cultures II
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Baehler, Patricia S
Description: Student may contact the instructor or department for information.

EngL 3006W Survey of American Literatures and Cultures II
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Lekas, Michelle Yvonne
Description: Student may contact the instructor or department for information.

EngL 3006W Survey of American Literatures and Cultures II
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Woo, Jewon
Description: Student may contact the instructor or department for information.

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807 Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Hirsch, Gordon D
Description: What makes the plays of William Shakespeare popular and interesting nearly 400 years after his death? We will read and discuss approximately ten Shakespeare plays in an effort to answer this question. The readings will represent a variety of genres and the chronological range of Shakespeare's career as a playwright. Likely readings "Romeo and Juliet," "A Midsummer Night's Dream," "Richard II," "As You Like It," "Hamlet," "Twelfth Night," "Macbeth," "The Merchant of Venice," "King Lear," "The Winter's Tale," and "Antony and Cleopatra." This course fulfills a requirement for English majors, but non-majors are welcome too.
Style: 25% Lecture, 75% Discussion.
Grading: 60% reports/papers, 20% quizzes, 20% class participation.

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807 Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Sugnet, Charles J
Description: Readings will include some sonnets, Richard II, Romeo and Juliet, A Midsummer Night's Dream, Hamlet, Othello, King Lear, Macbeth, Anthony & Cleopatra, and The Tempest. Factual material and critical essays will be provided through a Moodle site. Class sessions will include a small amount of lecture, but will proceed largely by focused discussion based on discussion topics distributed in advance. Most sessions will include screening and discussion of a clip from a film version of the assigned play. Style: 25% Lecture, 25% Film/Video, 50% Discussion. Class will proceed by "focused discussion," based on readings and discussion questions handed out in advance. Second half of many class sessions will be devoted to screening and discussing a clip from a film of the relevant Shakespeare play.
Grading: Short Explication paper 20%; first take-home exam 35%, second take-home exam 45%
Exam Format: Essay based on a choice of assigned essay topics; possibly a short answer section on the final exam as well.

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807 Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Hancher, Michael
Description: William Shakespeare: poet, playwright, historian, and source of passionate debate; his cultural importance is the least controversial of the Bard of Avon's qualities. Often called the first 'psychological' writer because of his keen analysis of human motives and emotions, Shakespeare's writings and person provide material for endless study. This course will provide intermediate readers of Shakespeare with a new perspective on the writer, the man, and his body of works, considering him as both a creator and creation of his culture and ours. Attention will be paid to historical context as well as Shakespeare's continuing, contemporary social relevance. Students will develop a variety of critical reading and writing skills and strategies in order to respond thoughtfully and effectively in discussions and their writing. This course will clarify the sometimes challenging and archaic language of Shakespeare's writing while paying attention to recurring themes such as representations of beauty, marriage and death in order to explore the relationships between his diverse works and history.
EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807
Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Elfenbein, Andrew
Description: William Shakespeare: poet, playwright, historian, and source of passionate debate; his cultural importance is the least controversial of the Bard of Avon's qualities. Often called the first 'psychological' writer because of his keen analysis of human motives and emotions, Shakespeare's writings and person provide material for endless study. This course will provide intermediate readers of Shakespeare with a new perspective on the writer, the man, and his body of works, considering him as both a creator and creation of his culture and ours. Attention will be paid to historical context as well as Shakespeare's continuing, contemporary social relevance. Students will develop a variety of critical reading and writing skills and strategies in order to respond thoughtfully and effectively in discussions and their writing. This course will clarify the sometimes challenging and archaic language of Shakespeare's writing while paying attention to recurring themes such as representations of beauty, marriage and death in order to explore the relationships between his diverse works and history.
Style: 25% Lecture, 75% Discussion.
Grading: 70% quizzes, 20% in-class presentation, 10% class participation.

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807
Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Haley, David B
Description: This course has been designed to teach you how to read Shakespeare's plays. Each meeting will focus on a specific text from THE NECESSARY SHAKESPEARE, ed. Bevington, which we will take turns reading aloud in class. These readings will use up about 25% of our class time. Another 25% will be allotted to the instructor who, while filling in the plays' historical background, will also lay out their main themes and try to make those as familiar to you as they were to Shakespeare's original audiences. The other 50% of our class time will be given over to discussion, which will grow out of our questions about the reading and interpretation of Shakespeare's text. You should avoid this course if you dislike paying close attention to a literary text. If on the other hand you want to experience Shakespeare's plays the way he intended, this is the course for you.
Style: 25% Lecture, 50% Discussion. Reading Shakespeare aloud in class
Grading: 30% reports/papers, 40% quizzes, 30% class participation.
Exam Format: Half-hour tests, based on study questions and requiring short essay answers

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807
Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Krug, Rebecca L
Description: Student may contact the instructor or department for information.

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807
Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Flack, Christopher Harrison
Description: This fully online section is offered through Online and Distance learning, College of the Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Plays from all of Shakespeare's periods, including at least A Midsummer Night's Dream, Hamlet, the history plays, King Lear, Macbeth, The Tempest, Twelfth Night, Antony and Cleopatra, Othello, and The Winter's Tale.
Style: Online with handwritten exam
Grading: 20% final exam, 50% reports/papers, 10% quizzes. -6 discussion assignments (20%)
Exam Format: Supervised, in-person exam

EngL 3007 Shakespeare
A-F only, 3 credit(s); credit will not be granted if credit already received for: EngL 3807
Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Tandy-Treiber, Ann Marie
Description: Student may contact the instructor or department for information.

EngL 3007H Honors: Shakespeare
A-F only, 3 credit(s); Honors or instr consent credit will not be granted if credit already received for: EngL 3007, 3807
Credit will not be granted if credit has been received for: ENGL 3007H; Meets CLE req of Literature
Instructor: Garner, Shirley Nelson
**EngL 3020 Studies in Narrative: Apocalyptic Literature**

3 credit(s), max credits 9, 3 completions allowed; Credit will not be granted if credit has been received for: ENGL 5020; Instructor: Watkins, John

**Description:** Studies in Narrative: Apocalypse Now Ready for 2012 and the End of the World? For at least two and a half millennia, prophets, politicians, and poets have crafted terrifying accounts about the end of the world. This comparatist seminar examines the way different cultures have imagined a final apocalypse with particular attention to the political and social consequences of their visions. The seminar opens with a unit on the ancient Middle Eastern texts that would influence apocalyptic belief in subsequent generations: the Bahman yast (Middle Persian), the Book of Daniel (Hebrew), and the Book of Revelation (Greek). Our second unit on the premodern Apocalyptic will focus on the writings of St. Augustine, who vehemently rejected the Book of Revelation as a literal description of the end of time, the Florentine revolutionary Girolamo Savonarola, and the English poets Edmund Spenser. In the second half of the course, we turn to the role of apocalyptic thought in the American Republic. Our third unit focuses on the flowering of apocalyptic speculation following the Second Great Awakening with particular attention to two radical communities, the Millerites and the Latter Day Saints. Our final unit carries the story through the twentieth century with particular attention to the scientific apocalypse that underlies such films as The Invasion of the Body Snatchers and 28 Days Later and to the role of the so-called Religious Right in contemporary U.S. politics. There will be an exam and two extended writing assignments.

**Style:** 24% Lecture, 75% Discussion.

**Grading:**
- 30% reports/papers, 15% class participation.

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**EngL 3024 The Graphic Novel**

3 credit(s);

**Instructor:** Rowe, Michael H

**Description:** Student may contact the instructor or department for information.

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**EngL 3027W The Essay**

4 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** This is a course for students ready to face more challenging assignments and deepen their comfort and skill with writing. The instructor helps the student develop more sophisticated research strategies and experiment with more creative stylistic choices. Assignments might include autobiographies, critical comparisons, reviews of articles or books, cultural analyses, persuasive essays, and annotated bibliographies. Students in this course learn to: Generate topics and develop essays with greater independence than about content, rhetoric, structure, vocabulary, style, and format. Write creative non-fiction and other genres incorporating complex description and analysis. Analyze the conventions and styles of writing in their major field. Experiment with new and more sophisticated writing strategies and styles.

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**EngL 3030 Studies in Drama: Shakespeare, the Late Greek & Roman Tragedies**

3 credit(s), max credits 9, 3 completions allowed; Credit will not be granted if credit has been received for: ENGL 5030; Instructor: Clayton, Tom

**Description:** Shakespeare: The Great Late Greek and Roman Tragedies Shakespeare's last three tragedies Antony and Cleopatra, Coriolanus, and Timon of Athens are in many ways his most powerful and challenging. They were written at the height of his expressive powers to probe sociopolitical, psychological, and spiritual realities in ways and connections he had not earlier attempted so intensively if at all. In the newly built Globe Theatre (1599), Julius Caesar was a not-so-dry run for both Hamlet (1600-01) and these plays (1606-08), and some account will be taken of it, accordingly. Shakespeare took his plots and more from Parallel Lives of the Greeks and Romans by the ancient moral philosopher and biographer Plutarch as translated into English by Sir Thomas North from Jacque Amyot's French translation from the Greek. Plutarch affords one way into the theater of genius and was a thinker and writer of significance and distinction himself, one ripe for ranging intertextualities. Aristotle will play a part for us, too, but this is not a post-hoc-ergo-propter-hoc-tive course, and the emphasis will be on what Shakespeare wrote and how that means, was designed, and affects audiences via any medium including film, notably the recent Coriolanus (2011) directed and starred in by Ralph Fiennes. I have heard students say that tragedies are depressing, but plays are works of art, not life, and art and intellection transcend depression where they penetrate and then may well relieve it. The cheerful collective of a discussion class may do much, and the course will be regularly e-mail enhanced, but not Powerpoint-pestered.

**Style:** 30% Lecture, 10% Film/Video, 45% Discussion, 15% Small Group Activities. Distribution of time is bound to vary somewhat...
from class to class.

**Grading:** 15% mid exam, 15% quizzes, 35% additional semester exams, 25% reflection paper, 10% in-class presentation. 3 exams, the third 20%. The papers will be analytical, not open-ended "reflection."

**Exam Format:** Some objective questions, but mostly analysis and essay.

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**EngL 3070 Studies in Literary and Cultural Modes**

3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Sprengnether, Madelon M

**Description:** Student may contact the instructor or department for information.

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**EngL 3071 The American Food Revolution in Literature and Television**

3 credit(s);

**Instructor:** Farber, Lianna

**Description:** America's relationship with food and eating has changed profoundly over the past fifty years. At the heart of this revolution was a group of charismatic personalities who through writing and television brought first European and then global sensibilities to the American table. They persuaded Americans that food and cooking were not just about nutrition but also forms of pleasure, entertainment, and art; ways of exploring other cultures; and means of declaring, discovering, or creating identity. Their work would eventually transform the American landscape, helping give rise to the organic movement, farmers markets, locavorism, and American cuisine, as well as celebrity chefs, the Food Network, and restaurant reality t.v. In the mean time the environmental movement was sending its own shockwaves through American consciousness of food production and consumption. The joining together of these movements, culinary and environmental, has brought a new ethical dimension to the subject that is now at the forefront of current concerns about American food. This class will trace the American food revolution, beginning with the native food landscape in the 1930s dominated by older food traditions (as documented by the WPA "American Eats" project) and domestic scientists, intent on standardizing food. We will read classic literature from the rise of the movement, in varying degrees instructional, personal and documentary, while viewing some seminal television moments for the food culture we now know. We will give particular attention to recent work that focuses on the personal and environmental ethics of food. Texts will include select episodes of Julia Child's television oeuvre and writing by M.F.K. Fisher, James Beard, Julia Child, Anthony Bourdain, Eric Schlosser, and Michael Pollan.

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**EngL 3090 General Topics**

3 credit(s), max credits 12, 3 completions allowed;

**Instructor:** Liberman, Anatoly

**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. At present those interested in English etymology study the history of English, methods of linguistic reconstruction, Sanskrit, Greek, Latin, French and so forth. Every subject can be studied in depth, and this is what specialists do. But it is also possible to be introduced to a scholarly discipline and learn enough to have an informed opinion about it. This course is exactly such an introduction. Its user can be anyone who wants to know how the words of English emerged, clashed, combined, lost their initial freshness, and died, to give way to upstarts whose day will also come. We will travel from the misty home of the Indo-Europeans to the North Sea and Great Britain. We will follow the Vikings and the Normans. The books and audio recordings will be your guides in these peregrinations.

**Style:** This is a printed correspondence section.

**Grading:** 35% reports/papers, 65% written homework.

**Exam Format:** No exams
EngL 3090 General Topics
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Liberman, Anatoly
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. At present those interested in English etymology study the history of English, methods of linguistic reconstruction, Sanskrit, Greek, Latin, French and so forth. Every subject can be studied in depth, and this is what specialists do. But it is also possible to be introduced to a scholarly discipline and learn enough to have an informed opinion about it. This course is exactly such an introduction. Its user can be anyone who wants to know how the words of English emerged, clashed, combined, lost their initial freshness, and died, to give way to upstarts whose day will also come. We will travel from the misty home of the Indo-Europeans to the North Sea and Great Britain. We will follow the Vikings and the Normans. The books and audio recordings will be your guides in these peregrinations.
Style: This is a printed correspondence section.
Grading: 35% reports/papers, 65% written homework.
Exam Format: No exams

EngL 3132 The King James Bible as Literature
3 credit(s);
Instructor: Haley, David B
Description: King James Bible as Literature: The Jewish Bible We'll read and analyze the literature of the Jewish Bible (what Christianity calls the "Old Testament"). The first half of the course will be concerned with the Torah (Genesis, Exodus, Leviticus, Numbers, Deuteronomy) and the narratives (Joshua, Judges, Samuel, Kings). The second half will take up the Prophets (Isaiah and the minor prophets) and the Writings (Psalms, Job, Proverbs, Ecclesiastes, Ruth, Esther, Daniel). All biblical readings will be in the King James Version (published by Zondervan with the parallel text of the New International Version). Instead of exams, you will take a quiz each week based on study questions, and you'll write a 2000-word term paper in place of the final.
Style: 80% Lecture, 20% Discussion.
Grading: 60% reports/papers, 40% quizzes.
Exam Format: The tests are based mainly on study-questions

EngL 3151 Romantic Literatures and Cultures
A-F only, 3 credit(s);
Instructor: Baltzer-Lovato, Jennifer A
Description: Student may contact the instructor or department for information.

EngL 3212 American Poetry from 1900
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

EngL 3301 Asian America Through Arts and Culture
3 credit(s); Credit will not be granted if credit has been received for: AAS 3301; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Lee, Josephine D
**EngL 3597W Introduction to African American Literature and Culture I**

**Description:** Through the analysis of theater, dance, music, visual arts, and other artistic practices, Asian American Through Arts and Culture increases awareness of the artistic contributions as well as the history, politics, and culture of Asian Americans. This term we will focus on Asian American theater and drama, looking at plays by a range of modern and contemporary artists. Students will analyze, critique, and interpret these plays in light of the historical and social contexts in which they were produced, their creation and uses of aesthetic form, and their impact on individuals and communities. Discussion, writing assignments, and oral presentations will focus on different ways of encountering and evaluating drama; for instance, students will write critical analyses and production reviews. We will examine what it means to define artists and their work as being "Asian American" and explore how other categories of identity such as gender, sexuality, or class intersect with race. We will study how art works not only as individual creativity but also as communal and social practice; for instance, we look at the history of theaters, such as East-West Players or Pan Asian Repertory Theatre, that have sustained Asian Americans as actors, playwrights, and designers. The course has a service-learning option that allows students to work with the wealth of resources in local Asian American arts communities, with groups and organizations such as the Center for Hmong Arts and Talent, Mu Performing Arts, or Pangea World Theater. Students will be asked to attend local arts events.

**Style:** 20% Lecture, 80% Discussion.

**Grading:** 80% reports/papers, 10% attendance, 10% in-class presentation.

**EngL 3352H Honors: Weird Books by Women**

**A-F only, 3 credit(s); Honors or instr consent Credit will not be granted if credit has been received for: ENGL 3352;**

**Instructor:** Damon, Maria

**Description:** Student may contact the instructor or department for information.

**EngL 3505 Community Learning Internships I**

**A-F only, 3 credit(s);**

**Instructor:** Daigre, Eric Stephen

**Description:** Since this is the first of a two-semester course, students registering for EngL 3505 will continue on to EngL 3506 (Community Learning Internships II). In class, students will explore literacy, educational theory, concepts of civic engagement, as well as the connections between literature and literacy, theory and practice, community work and academic study. Outside of class, students work 3-4 hours per week at participating nonprofit and educational organizations ranging from K-12 schools to adult education centers. Class presentations. Readings. Weekly reflective and analytical writing assignments will add up to a substantial portfolio. Students receive initial training from Career and Community Learning Center and Minnesota Literacy Council, and orientations at community sites.

**EngL 3507W Introduction to Chicana/o Literature**

**3 credit(s); Credit will not be granted if credit has been received for: CHIC 3507W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive**

**Instructor:** Duenes, Michael

**Description:** Student may contact the instructor or department for information.

**EngL 3592W Introduction to Black Women Writers in the United States**

**3 credit(s); Meets CLE req of Writing Intensive**

**Instructor:** Pate, Alexs D.

**Description:** This course seeks to explore the literary production of North American Black women from diverse backgrounds and perspectives. Through their varied and common experiences of Black females living in a white-male-dominated culture, we will endeavor they understand the social construction of race and gender, as well as, their intersection with class and social-economic dynamics. In the Black cultural and literary traditions of truth narratives, and transparency, these women share their historical, cultural, and contemporary experiences and insights with verve and authority. At the heart of their literary pursuit is the aspiration to live a more informed, enriched, and inspired life. In so doing, these writers offer us important lessons about creativity, hope, empowerment, courage, and self-expression.

**EngL 3597W Introduction to African American Literature and Culture I**

**4 credit(s); Credit will not be granted if credit already received for: Afro 3591W; Credit will not be granted if credit has been received for: AFRO 3597W; Meets CLE req of Writing Intensive**

**Instructor:** Wright, John S

**Description:** African Americans are "America's metaphor" Richard Wright declared, posing both a riddle and a riff - a wry reversal of conventional perspectives. Wright intimated that we might discover in the shadows of American literary life our brightest mirrors. We might thereby see ourselves—and the paradoxes and potentialities of our national experience—through the world of words and images conjured up over the past two centuries by African American writers. African American literature is a heavily "committed" tradition with both ancient African and Euro-American antecedents. Much of its mythological system and special "equipment for living" has been built on the communal base of the most elaborate vernacular tradition in American English—epic tales and legends, spirituals, blues, work
songs, ballads, rhymed toasts, riddles, proverbs, jazz, jokes, and the rhetoric of rap music. Over the course of two semesters, in exploring the intricate world of cultural myth and metaphor that has resulted, our own caravan will lead us forward from pre-modern Africa itself and the era of the earliest African American literary works - 18th and 19th century slave autobiographies, oral folk texts, abolitionist essays, orations and poems-on to the contemporary period of literature marked by burgeoning diversity and modernist innovation, by growing critical acclaim, and by POLITICO-aesthetic movements such as the Jazz Age Harlem Renaissance and the Black Arts Movement of the 1960s and 70s.

**Style:** 40% Lecture, 40% Discussion, 5% Laboratory. outside film viewings and online assignments

**Grading:** 83% reports/papers, 17% quizzes.

**Exam Format:** Quizzes are multiple choice and short answer

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**EngL 3601 Analysis of the English Language**

**4 credit(s);**

**Instructor:** Eiscure, Genevieve J

**Description:** This course is a general introduction to basic issues in language structure and language use, with specific application to English, and occasional extension to other languages. The focus is on oral systems, which are universally shared by all human cultures, whereas written is a secondary, late development of speech patterns. First, we highlight the universality of language by referring to the physiological/biological foundations of language, and the basic features that characterize language dynamics. The course is thereafter organized into two general sections: 1) A general examination and explanation of cognitive aspects of language, through concrete illustrations of its major components as they apply to English. Those components include: a) the structure of sounds (phonetics and phonology); b) the structure of words (morphology); c) the structure of sentences (syntax); and d) the structure of meaning (semantics); and e) the structure of discourse in context (pragmatics). The process of native language acquisition is then presented as evidence for the fundamental concepts outlined above. 2) An overview of social and behavioral aspects of language. Contemporary language variation is examined from a sociolinguistic perspective. We study the correlation between linguistic components (as presented in the first part of the course), and external social variables, such as socio-economic status, ethnicity, gender, and age. Language variability is presented in the context of stylistic shifts and code switching, with reference to differences between standard and nonstandard varieties (e.g., African American English, Gullah and other pidgins and creoles), and relevant educational applications. Finally, we relate the historical (diachronic) development of English to its contemporary (synchronic) state.

**Style:** 70% Lecture, 20% Discussion, 10% Web Based.

**Grading:** 4 exams distributed throughout the semester, and graded 20%; 25%; 30%; 25%. No midterm or final exam. Attendance is compulsory.

**Exam Format:** multiple choice; true/false; open questions; and exercises specific to different topics.

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**EngL 3711 Literary Magazine Production Lab I**

**A-F only, 4 credit(s);**

**Instructor:** STAFF

**Description:** In the first of two sequential courses (ENGL 3712 registration required), students produce the undergraduate art and literary magazine Ivory Tower. Students decide upon the desired identity, tone, and direction of the issue. They explore and take on magazine staff responsibilities. They call for submissions, make selections, investigate the edit and design processes, set a budget and begin fund-raising.

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**EngL 3741 Literacy and American Cultural Diversity**

**4 credit(s);** Meets CLE req of Civic Life and Ethics; meets CLE req of Literature

**Instructor:** Daigre, Eric Stephen

**Description:** Students will serve as literacy workers for 2 hours a week outside of class at participating organizations in the nonprofit and educational sectors. This class combines academic study with experiential learning in order to collectively build a more engaged, complex understanding of the functions of literature, literacy, educational institutions, counter-institutional literacy programs, and the different cultures and communities in Minnesota and the Americas in general. We'll explore questions of *praxis,* considering and applying our readings to the concrete circumstances of our community work, at all points trying to *"make the connection"* between our classroom and community work. In asking what literacy really means and what it means to be "democratic educators" in both spheres, we will challenge the distinction between classroom and community as an artifact of the modern research university. Reading: literary texts, sociological and educational theory, literacy studies. 2 papers, 2 presentations.

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**EngL 3741 Literacy and American Cultural Diversity**

**4 credit(s);** Meets CLE req of Civic Life and Ethics; meets CLE req of Literature

**Instructor:** McWhorter, Rachel J

**Description:** Student may contact the instructor or department for information.

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**EngL 3883V Honors Thesis**

**A-F only, 1-4 credit(s), max credits 4, 4 completions allowed; Meets CLE req of Writing Intensive**
EngL 3960W Senior Seminar: Jane Austen, Charles Dickens, George Eliot
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Goldberg, Brian B
Description: Student may contact the instructor or department for information.

EngL 3960W Senior Seminar: Memoir and History
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Hirsch, Gordon D
Description: This Senior Seminar will focus on twentieth-century and contemporary memoirs. Readings will include memoirs that have become canonical, such as Mary McCarthy's Memories of a Catholic Girlhood, Maxine Hong Kingston's The Woman Warrior, and Tobias Wolff's This Boy's Life. It will also include recent memoirs, some of them written by authors who grew up in Minnesota, such as Patricia Francisco's Telling, Michele Norris's The Grace of Silence, and Kao Kalia Yang's The Latehomecomer: A Hmong Family Memoir. These stories offer different forms of memoir, and they tend to treat in various ways the experience of "growing up," the relationship between history and memory, and the meaning of place within a family, a town or city, and a country, or "place" as otherwise understood and defined. Students will write several short papers of two or three pages to prepare them to write their senior seminar paper. The final paper will be a culminating essay, in which students write a memoir of their own or a critical analysis of a memoir, one by an author we have studied (other than the memoir we study in class) or by another memoir writer.
Style: 10% Lecture, 50% Discussion, 20% Small Group Activities, 15% Student Presentation, 5% Guest Speakers.
Grading: 75% reports/papers, 10% in-class presentation, 15% class participation. I follow stated University grading guidelines.

EngL 3960W Senior Seminar: Red Pulp--Commie Trash & Other Works of Art
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Rabinowitz, Paula
Description: Student may contact the instructor or department for information.

EngL 3960W Senior Seminar: Stuart England
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Matar, Nabil I
Description: Student may contact the instructor or department for information.

EngL 3993 Directed Study
OPT No Aud, 1-4 credit(s), max credits 8;
Instructor: STAFF
Description: Guided individual study. Open to qualified students for one or more semesters. Before receiving permission to register, students submit to the English Undergraduate Studies office a signed contract using the CLA "Student/Faculty Learning Contract" available in all CLA offices.

EngL 4003 History of Literary Theory
A-F only, 3 credit(s);
Instructor: Farber, Lianna
Description: This course explores some of the major questions about literary theory that preoccupied important thinkers from antiquity through modernism by looking at how they posed and answered questions about language (how words mean), audience (to whom they mean) and the literary (how literary writing differs from other forms of writing). We will begin by examining how theorists thought that words bear meaning: when, for example, can words carry more than their literal meaning? Must they always carry more than their literal meaning? If and when they do carry "extra" meaning, how do we know what to understand? Next, we will look to questions of audience: who is the implied audience for literature? Is the implied audience necessarily male? Is the audience's understanding of a work of literature the same as the author's? how can the author manipulate understanding? What is the relationship between literature and rhetoric? Finally, we will explore these theorists' understanding of what literature is and how it differs from other kinds of writing.
Readings will include works by Plato, Aristotle, Augustine, Christine de Pizan, Dante, Sidney, Behn, Wordsworth, Coleridge, Shelley, and Woolf.
Style: 25% Lecture, 75% Discussion.

EngL 4233 Modern and Contemporary Drama
A-F only, 3 credit(s);
Instructor: Lee, Josephine D
Description: This course surveys a range of works written for theater in the 19th and 20th century. The course will emphasize how the
major aesthetic forms of modern drama—the well-made play, realism, expressionism, symbolism, epic theater, absurdism; presented not just distinctive theatrical styles, but also new ways of "seeing" for the theatrical spectator. We will also look at how social differences, as informed by gender, class, and race, informs the content and presentation of these plays. Emphasis will be placed on understanding theatrical form and production as well as the demands of reading dramatic literature.

**Style:** 25% Lecture, 50% Discussion, 25% Small Group Activities.

**Grading:** 75% reports/papers, 10% attendance, 15% class participation.

**EngL 4593 The African-American Novel**

*3 credit(s); Credit will not be granted if credit has been received for: AFRO 4593;*

**Instructor:** Wright, John S

**Description:** AFRO / ENGL 4593: The African American Novel Since romanticism and literary abolitionism converged in the 1850s, African American storytellers have discovered strategic uses for the modern novel -- making it both an ethical instrument and a vessel of ancestral traditions. Inclined initially more to social realism than to fantasy, romance, or surrealism, black American novelists have created a "committed" literature rooted in the view that the images and ideas of the novel are potential weapons in the struggle for social justice and social transformation. Yet an ever-ready countercurrent of comedies, satires, historical fables, and speculative fictions conjured up by African American novelists express their indebtedness also to philosophical and folk traditions that view literature as a ritualistic and healing exploration of human possibility and the transmundane — of alternate worlds and worldviews. This course explores these African American novelistic traditions — plot patterns, character types, settings, symbols, themes, movements, and mythologies. From the little known novelistic worlds of late nineteenth century preachers and journalists to Harlem Renaissance political thrillers and urban picaresques to internationally renowned neo-slave narratives, Black Arts magic realism, and philosophical metafictions from the late twentieth century, we will steer a course through the creative and critical torrents of the modern black imagination. Because these writers have been profoundly concerned with social and historical "truth", we will find that the materials and techniques of many African American novels, while dramatizing the conflicts and consciousness of the individual, attempt to "reconstruct" emblematically the experiences and historical consciousness of the group. To complement lectures, during regular class meetings we will rely periodically on filmed interviews or documentaries, as well as on a variety of informal small groups to help focus your attention on the texts and concepts at hand, to strengthen your abilities to articulate and share what you have learned, and to provide another gauge of how successfully you are mastering various elements of the course. The course is designed for advanced undergraduates and graduate students. Written assignments and grading options as follows: Critical Research Paper: Each student is required to write an 10-12 page typed research paper (15-20 pages for graduate students) examining the critical reception (original reviews, etc.), interpretive controversies, and current standing of one of the course novels Grades: Option A - 40% journal, 40% term paper, 10% one-page rationales, 10% class participation Option B : 30% short paper, 50% term paper, 10% rationales, 10% class participation

**EngL 4603W World Englishes**

*4 credit(s); Meets CLE req of Writing Intensive*

**Instructor:** Escure, Genevieve J

**Description:** English has become a global lingua franca, thus adding complementary varieties rather than competing with native languages. In the process, it has diversified to reflect local, ethnic and national identities. We will examine the wide range of structural and functional variation represented in the use of English on various continents. As a pidgin or a creole (in Atlantic and Pacific regions), English has incorporated African or Melanesian influences. As a contact vernacular (in Singapore, or with African-Americans), it has become a marker of ethnic or national identity. As a trade or business language, often learned as a second language (e.g., Indian English, or Hong-Kong English) it reflects phonological and syntactic features of native local languages. Contrary to the norm-oriented tradition represented in prescriptive grammars, live language is a multifaceted, dynamic medium, which adapts to its speakers and their changing needs, reflects their identities, and creates new attitudes. The widespread use of English and its diversification constitutes an appropriation of a conveniently available code as lingua franca, whether it functions as a native or a nonnative language. A sociolinguistic perspective is applied to the analysis and investigation of selected varieties of English spoken around the world. Special attention is given to those societies in which some form of English competes or coexists with other languages. Socio-economic, political, psychological and educational factors are key elements in the expansion of New Englishes. They will be examined in the context of several societies from the North and the South. The course includes a theoretical, as well as an empirical component. On the one hand, the current status of current linguistic and sociolinguistic research is reviewed, and theoretical models for analyzing language variability are briefly outlined and evaluated. On the other hand, various case studies illustrating methodology and English-related language use in a cross section of social groups are read and discussed, with reference to the political, economic and educational implications of language variability. Special attention will be given to the analysis of socially diagnostic linguistic features in various speech communities in English-speaking areas in North and Central America, and the Caribbean, parts of Africa, India, and the Pacific area. Contact languages to be discussed or briefly analyzed include nonstandard or vernacular native varieties (i.e., Hiberno-English, African American English), mixed varieties (Spanglish, Singlish, Indian English), and pidgins/creoles resulting from specific types of language contact (Belizean Creole, Nigerian Pidgin).

**Style:** 50% Lecture, 25% Discussion, 25% Student Presentation. This class functions as a seminar, based on dynamic class interactions and exchanges of ideas

**Grading:** 60% reports/papers, 20% in-class presentation, 20% class participation. Research paper is the primary objective
Exam Format: no exam

**EngL 4722 Alphabet to Internet: History of Writing Technologies**
4 credit(s);
Instructor: Hancher, Michael
Description: Technologies of writing -- the alphabet, handwriting, printing, and electronic text -- and their cognitive and social consequences. Topics include writing and memory; literacy, power, and control; printing, language, and national identity; alphabetization and other ways of ordering the world; secrecy, privacy, and publicity; typography, legibility, and design; theories of technological determinism; the future of reading after the internet. Readings will range from Homer and Plato to Wikipedia and Facebook.
Style: 40% Lecture, 60% Discussion.
Grading: 65% reports/papers, 10% in-class presentation, 15% class participation, 10% other evaluation. "Other Evaluation" is 10% for online comments on readings. The "basic course requirements" (mentioned in the University definitions of course grades) include regular attendance.

**EngL 5001 Ph.D. Colloquium: Introduction to Literary Theory and Literary Studies in the Modern University**
3 credit(s);
Instructor: Messer-Davidow, Ellen
Description: Student may contact the instructor or department for information.

**EngL 5020 Readings in Narrative**
3 credit(s), max credits 9, 3 completions allowed; Grad student or instr consent
Credit will not be granted if credit has been received for: ENGL 3020;
Instructor: STAFF
Description: From fables, tales, and classics to picture books, graphic novels, and popular fiction, this course focuses on the history and development of children's literature in Britain and the United States. Along with reading, analyzing, and discussing the literary and visual elements of such works as Robinson Crusoe, Alice's Adventures in Wonderland, Where the Wild Things Are, and Harry Potter, we will also consider the ways in which social, cultural, political, and technological factors impact publishing for children. Underlying our examination of the literature will be the discussion of the concept of childhood, including an investigation of what constitutes childhood and the role of children, and how these have changed over time and across cultures. This course also provides a review of current scholarship and research in children's literature.

**EngL 5090 Readings in Special Subjects**
1-4 credit(s), max credits 9, 3 completions allowed; grad student or instr consent
Credit will not be granted if credit has been received for: ENGL 5100;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

**EngL 5150 Readings in 19th-Century Literature and Culture: Fin de Siecle**
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Cucullu, Lois B
Description: "Fin de Siecle" The Fin de Siecle remains a pivotal decade in the history of modernity. Situated at the close of a century of national expansion, economic reorganization, urban concentration, imperial aggression, demographic shifts, technological innovation, and the standardization of time, it would beckon to a new century in which change would precipitately accelerate. This course aims at examining a cross-section of the narratives informing the decade branded as decadent on one side of the Atlantic and as gilded on the other. Among the works considered will be those by the following: Conrad, Doyle, Du Bois, Freud, James, LeBon, Nietzsche, Nordau, Simmel, Shaw, Tarde, Veblen, Weber, Wells, Wharton, and Wilde.

**EngL 5711 Introduction to Editing**
4 credit(s);
Instructor: STAFF
Description: If the media doomsayers are right, editing is a dying craft. Right now, polytechnic institutes are training the next generation of copyeditors in Bangalore. Newspapers are shedding weight like dueling celebs in an US photospread. Bloggers are proving that no one need come between a rant and a reader. (Granted, they're doing it one typo at a time.) But someone, somewhere, has to generate that alumni magazine, the St. Paul Saints season guide, and the co-op newsletter. In other words, a demand persists in the American marketplace for someone who knows how to turn slop into steak. In this class, we'll study editing as a process, a protocol, and a philosophy. To elaborate, we'll study the conventions of editing (grammar, story, and style) and we'll meet professionals who do it well. (Fall '08 guests included the editor in chief of the Minnesota Historical Society Press, the art director of City Pages, the media analyst at MinnPost, and an executive employment lawyer at U.S. Bancorp.) We'll analyze why creative collaboration can feel
like a playground brawl. Mostly, using real, raw manuscripts from newspapers, magazines, and books, we'll practice how to screw up the written word—with the ultimate goal of screwing up a little less.

EngL 5711 Introduction to Editing
4 credit(s);
Instructor: Zuckerman, Jeffrey Jay
Description: This section is offered entirely online through Online and Distance Learning (ODL), College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. You may be wondering whether this course can help you if you are interested in magazine and newspaper editing. Although you will be focusing on nonfiction texts, the skills you learn here will apply to other areas of editing. All editing requires that you exhibit creativity, clarity, and consistency. This course will also help you become a better editor of your own writing and a more perceptive and intelligent reader of other's writing. You will begin to note how authors put words together, use punctuation, and construct sentences and paragraphs. You will come to appreciate the well-chosen word, the well-turned phrase, the considered opinion, the persuasive argument.
Style: 100% Web Based.
Grading: 25% final exam, 70% written homework. Practice exam (5%)

EngL 5800 Practicum in the Teaching of English
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Daigre, Eric Stephen
Description: This course is an introduction to the theory and practice of teaching literature and creative writing at the college level. We will reflect on our teaching in light of our experiences, our readings, and our class discussions. We will model, practice, and report back on various teaching methods and activities, both in our discussions and interactive learning activities, and—beginning at mid-semester—through more structured “teaching dialogues.” We will apply the very skills we aim to impart to our undergraduate students—critical reading, writing, and thinking—to ourselves as we analyze our teaching through regular journal writings and final projects. This course is required for (and limited to) new graduate students in the English MA, MFA, and PhD programs.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Clayton, Tom
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Wright, John S
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Baxter, Charles Roger
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Sirc, Geoffrey Michael
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Damon, Maria
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Daigre, Eric Stephen
Description: Student may contact the instructor or department for information.
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Ismail, Qadri M
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Hirsch, Gordon D
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Sugnet, Charles J
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Weinsheimer, Joel Clyde
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Hancher, Michael
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Lee, Josephine D
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Elfenbein, Andrew
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Schumacher, Julie
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Esvere, Genevieve J
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Luke, David B
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Messer-Davidow, Ellen
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Watkins, John
Description: Student may contact the instructor or department for information.
EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Garner, Shirley Nelson
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Fitzgerald, M. J
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Hampl, Patricia
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Sprengnether, Madelon M
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Rabinowitz, Paula
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Haley, David B
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Brennan, Timothy Andres
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Scandura, Jani
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Cucullu, Lois B
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Craig, Siobhan S
Description: Student may contact the instructor or department for information.
EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Krug, Rebecca L
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Goldberg, Brian B
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Farber, Lianna
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Tinsley, Omise'ke Natasha
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Brown, Tony C.
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Scheil, Andrew
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Scheil, Katherine West
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Matar, Nabil I
Description: Student may contact the instructor or department for information.

EngL 8150 Seminar in Shakespeare: Shakespeare: Comedy
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Scheil, Katherine West
Description: ENGL 8150 Seminar in Shakespeare Global Shakespeare This course explores the premise that Shakespeare has become "the world's poet," an author whose works have been read, adapted, appropriated, and performed in nearly every corner of the world. Covering such topics as Shakespeare in Asia, Africa, and the Middle East, this course will examine how Shakespeare is enmeshed with local performance and cultural practices around the world, and how various connotations of "Shakespeare" have shifted according to time, place, and geography. Shakespeare in India, for example, is a different entity than Shakespeare in Africa. This course should appeal not only to students interested in Shakespeare, but also to those interested in global studies, nationalism, colonialism, heritage studies, performance traditions, theories of adaptation, and ideas of the transnational traffic of literary texts.

EngL 8170 Seminar in 19th-Century British Literature and Culture: Victorian Poetry
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Elfenbein, Andrew
Description: Student may contact the instructor or department for information.

EngL 8400 Seminar in Post-Colonial Literature, Culture, and Theory: Culture & Colonialism
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Ismail, Qadri M
EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Clayton, Tom
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Wright, John S
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Baxter, Charles Roger
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Sirc, Geoffrey Michael
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Damon, Maria
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Ismail, Qadri M
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Hirsch, Gordon D
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Sugnet, Charles J
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Weinsheimer, Joel Clyde
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Hancher, Michael
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Lee, Josephine D
Description: Student may contact the instructor or department for information.
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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Elfenbein, Andrew
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Schumacher, Julie
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Escure, Genevieve J
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Luke, David B
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Messer-Davidow, Ellen
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Watkins, John
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Garner, Shirley Nelson
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Fitzgerald, M. J
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Hampl, Patricia
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Sprengnether, Madelon M
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Rabinowitz, Paula
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Haley, David B
Description: Student may contact the instructor or department for information.
EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Ross Jr, Donald
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Brennan, Timothy Andres
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Scandura, Jani
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Cucullu, Lois B
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Craig, Siobhan S
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Krug, Rebecca L
Description: Student may contact the instructor or department for information.

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1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Goldberg, Brian B
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Farber, Lianna
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Tinsley, Omise’ek Natasha
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Brown, Tony C.
Description: Student may contact the instructor or department for information.
EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Scheil, Andrew
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Scheil, Katherine West
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Matar, Nabil I
Description: Student may contact the instructor or department for information.

English: Creative Writing 222 Lind Hall

EngW 1102 Fiction Writing (Intro)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Introductory course in the art and craft of reading and writing fiction. Students will read a variety of classic and contemporary fiction. Students will be responsible for composing original stories; writing comments on student work; workshop participation; attendance at a literary reading; and a final portfolio of fiction.
Style: 25% Lecture, 50% Discussion.
Exam Format: Revised stories/Final Portfolio

EngW 1103 Poetry Writing (Intro)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Introductory course in the art and craft of reading and writing poetry. Students will read and analyze contemporary and classic works of poetry while also constructing and revising their own poetry. Students will be responsible for crafting original poetry; commenting on student work; workshop participation; attendance at a literary reading; short presentations and/or papers; a final portfolio of poetry.
Style: 25% Lecture, 50% Discussion. workshop
Exam Format: Revised poems/final portfolio

EngW 1104 Journal, Essay, Memoir Writing (Introduction)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Introductory course in the art and craft of reading and writing literary nonfiction. Students will read and analyze contemporary and classic nonfiction literary works (essays, memoir, biography, autobiography, short-shorts) and also construct and revise their own nonfiction pieces. Students will be responsible for crafting original works of nonfiction; commenting on student work; workshop participation; attendance at a literary reading; short papers and/or presentations; a final portfolio of nonfiction.
Style: 50% Discussion, 50% Laboratory. workshop
Exam Format: Revised nonfiction/final portfolio of nonfiction

EngW 3102 Fiction Writing (Intermediate)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Intermediate course in the art and craft of reading/writing fiction for students with previous experience in fiction writing. Students will read and analyze contemporary and classic short fiction and also construct their own stories. Students will be responsible for written comments on student work; workshop participation; attendance at a literary reading; some short papers and presentations; and a final portfolio of short fiction.
Style: 25% Lecture, 50% Discussion. workshop
Grading: Revised fiction/final portfolio of fiction

EngW 3102 Fiction Writing (Intermediate)
OPT No Aud, 3 credit(s);
Instructor: Daniel, Judith A

Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The short story is a fascinating and very appealing form, particularly for American writers. Perhaps it is our history of discord, social upheaval, our restlessness and need for constant change that makes us so at home with a form that is short, intense, concentrated, and versatile. Whatever the reason, American writers of the past two hundred years have developed the short story form into a national treasure. From the wonderfully rambling descriptions of Washington Irving, whose dislocated citizen, Rip Van Winkle, slept through the Revolutionary War, to John Cheever's dislocated Neddy Merrill, who fast forwards into his own future, the American short story bristles with life and energy as it charts, more accurately than our history books, our world view, our lives, and our sense of who we are and what we are becoming.

Style: This is a printed correspondence section.

Grading: Your course grade will be based on your written assignments. 1, 2, 3, and 5 = 40% 4 and 6 (the first and final drafts of your short story) = 60% If you elect S/N grading, you must average at least a C- to earn a grade of S.

Exam Format: No exams

EngW 3104 Poetry Writing (Intermediate)
OPT No Aud, 3 credit(s);
Instructor: STAFF

Description: This intermediate level course is for writers who have some previous experience in writing poetry. The course will focus on craft and stylistic techniques using writing exercises and readings from a range of poets writing in different forms. The workshop portion of the class will be devoted to developing individual student work; student critiques; some short papers and presentations; attendance at one literary reading; final portfolio of poetry.

Style: 25% Lecture, 50% Discussion. workshop

Exam Format: Final portfolio of poems

EngW 3106 Journal, Essay, Memoir Writing (Intermediate)
OPT No Aud, 3 credit(s);
Instructor: STAFF

Description: This intermediate level course is for students who have some experience writing literary nonfiction: memoir, essay, biography, etc. Students will read and analyze contemporary and classic nonfiction works while also constructing and revising their own nonfiction writing. Written comments on student work, workshop participation, some short papers and presentations, attendance at a literary reading and a final portfolio of nonfiction writing.

Style: 25% Lecture, 50% Discussion.

Exam Format: revised nonfiction/final portfolio of nonfiction

EngW 3110 Topics in Creative Writing
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Daniel, Judith A

Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Journaling into Fiction, like all creative writing courses, can't be taught. I can start you on the way toward developing the craft of writing for a public audience, but your own love of reading and writing will be the most important impetus for your success. The other important thing you'll need is a passionate belief that you have something so exciting, interesting, and valuable to tell the rest of us that you will forge a pattern of words to make us pay attention. If you're not keeping a journal at the moment, start one today. This course is designed to work from your journals so if you're not keeping one, many of the suggestions and exercises won't make as much sense to you.

Style: This is a printed correspondence section,

Grading: 100% written homework.

Exam Format: No exams

EngW 3110 Topics in Creative Writing
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Daniel, Judith A

Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Journaling into Fiction, like all creative writing courses, can't be taught. I can start you on the way toward developing the craft of writing for a public audience, but your own love of reading and writing will be the most important impetus for your success. The other important thing you'll need is a passionate belief that you have something so exciting, interesting, and valuable to tell the rest of us that you will forge a pattern of words to make us pay attention. If you're not
keeping a journal at the moment, start one today. This course is designed to work from your journals so if you're not keeping one, many of the suggestions and exercises won't make as much sense to you.

**Style:** This is a printed correspondence section.

**Grading:** 100% written homework.

**Exam Format:** No exams

**EngW 3110 Topics in Creative Writing**

3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Daniel, Judith A  
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Journaling into Fiction, like all creative writing courses, can't be taught. I can start you on the way toward developing the craft of writing for a public audience, but your own love of reading and writing will be the most important impetus for your success. The other important thing you'll need is a passionate belief that you have something so exciting, interesting, and valuable to tell the rest of us that you will forge a pattern of words to make us pay attention. If you're not keeping a journal at the moment, start one today. This course is designed to work from your journals so if you're not keeping one, many of the suggestions and exercises won't make as much sense to you.

**Style:** This is a printed correspondence section.

**Grading:** 100% written homework.

**Exam Format:** No exams

**EngW 3110 Topics in Creative Writing: First Person Singular**

3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Hampl, Patricia  
Description: Student may contact the instructor or department for information.

**EngW 3960W Writing Workshop for Majors: Poetry**

A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Gonzalez, Ramon  
Description: Students will write and workshop original poetry. Readings from classic and contemporary poetry collections and anthologies. Students will be expected to write short critiques; short analytical reports on reading assignments; final portfolio of revised poetry. Writing exercises, videos and DVDs on famous poets, students will conduct at least one poetry reading of their work in assigned groups. No required texts. Readings to come from three major handout packets.

**EngW 5102 Advanced Fiction Writing**

4 credit(s), max credits 8;  
Instructor: STAFF  
Description: We will be reading and critiquing student fiction, including short stories and chapters from novels. I will be handing out guidelines for doing so at the first meeting. Members of the workshop should expect to have two, possibly three, manuscripts critiqued, each one approximately 15 to 20 pages in length, and we will also be reading and discussing short stories from an anthology, considering their formal properties. I will expect active participation from everyone, including written comments to be turned in to the week's contributors and to me.

**EngW 5104 Advanced Poetry Writing**
EngW 5106 Advanced Literary Nonfiction Writing
4 credit(s), max credits 8;
Instructor: STAFF
Description: Students will write and critique original works of creative nonfiction. Students will be expected to write short critiques; short reports on assigned reading material; final portfolio for revised creative nonfiction.

EngW 5130 Topics in Advanced Creative Writing: International Fiction Written in Second Tongues
4 credit(s), max credits 16, 4 completions allowed;
Instructor: Farah,Nuruddin
Description: Privileging Second and Third Tongues. This seminar will study a group of fiction writers from various countries and continents who chose, for a combination of reasons, to write major works in a language other than their mother tongue. The seminar will read and discuss work from such writers as Henry Roth, Joseph, Conrad, Samuel Beckett, Vladimir Nabokov, Edwidge Danticat, Salman Rushdie, Yambo Oulougouem, Irene Nemirovsky, Amitav Ghosh, and Laila Lalami. Course Instructor Nuruddin Farah is himself a novelist who has published eleven novels, four plays, and one book of nonfiction in English, which is his fourth language, and has won the Neustadt International Prize for Literature, among many other prizes.

EngW 5202 Journal and Memoir Writing
3 credit(s);
Instructor: Galt,Margot Kriel
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Remembering incidents and facts, mulling them over in the present, and extracting insights from them is one of a writer's most important activities. As a result of taking this course, you will be able to brainstorm material from your memory; use a journal to develop writing; draft memoir prose, employing principles of literary variety, appropriate diction, sensuous description, narrative momentum, poetic and thematic shaping, and suitable metaphor; employ principles of revision; use the response of readers or listeners to improve your work; identify and appreciate works of memoir by earlier and contemporary authors; and begin to understand how racial and ethnic differences affect the stories people tell about themselves.
Style: This is a printed correspondence section.
Grading: 100% written homework. The first submission is ungraded. The following three submissions are weighted equally. However, if there is a dramatic improvement during the course, later submissions will be given more weight than earlier ones.
Exam Format: No exams

EngW 5205 Screenwriting
4 credit(s);
Instructor: STAFF
Description: A hands-on advanced workshop for students with experience in creative writing and/or a working knowledge of basic screenplay format. Students' scripts-in-progress may be either a complete short film or an excerpt from a feature-length film. Class critiques will emphasize issues of imagery, characterization, plot and structure, as well as creative process within screenwriting. Also expect in-class screenings, guests, and nuts and bolts discussion about story pitches, synopses and other vagaries of the professional industry. For advanced undergraduates, graduate students, and writers from the community interested in continuing education. Ask for a permission number in 222 Lind Hall.

EngW 5310 Reading as Writers: Negative Capability
4 credit(s), max credits 8;
Instructor: Campion,Peter
Description: Student may contact the instructor or department for information.

EngW 5993 Directed Study in Writing
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: STAFF
Description: By arrangement with individual faculty. For more information, contact the Creative Writing Program at (612) 625-6366.

EngW 8101 Reading Across Genres
EngW 8170 MFA Practicum: EngW 1101W
S-N only, 3 credit(s);
Instructor: Campion,Peter
Description: Student may contact the instructor or department for information.

EngW 8180 Thesis Seminar: Multi-Genre
A-F only, 4 credit(s);
Instructor: Hampl,Patricia
Description: Student may contact the instructor or department for information.

EngW 8990 MFA Creative Thesis
2-8 credit(s), max credits 48, 24 completions allowed;
Instructor: Frederickson,Karen Margaret
Description: Student may contact the instructor or department for information.

Entomology  219 Hodson Hall

Ent 1005 Insect Biology
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Fallon,Ann M
Description: This is an introductory course on the biology and study of insects and their arthropod relatives. This course with the lab fulfills the Liberal Education Requirement for a core course in the BIOLOGICAL SCIENCES. There are no prerequisites for this course. Please contact the instructor if you want to take the LECTURES ONLY (3 credits, no lab, no CLE credits). Insects are one of the most abundant life forms on earth. They enhance our appreciation of the environment and its natural beauty, provide important biological systems for medical and ecological research, impact our health, and damage our crops and homes. The decisions we make about insects have important impacts on our own lives, as well as on the global human community, environmental and ecological health, and the interface between existing and emerging technologies and their effects on the organisms that inhabit our planet. ENT 1005 is structured around a body of knowledge that will provide an overview of the insect orders and their diversity. Topics such as plague, fleas and prairie dogs, colony collapse disorder in honeybees, and the controversy over use of DDT to reduce malaria in developing countries will be integrated into this overall framework. These topics will provide fundamental biological knowledge needed to make informed decisions about insect-related topics in a global society. Laboratory exercises will focus on live specimens, and provide examples of how insects are cultured, used as laboratory models in physiology and toxicology, and studied by ecologists and entomologists.
Style: 60% Lecture, 5% Discussion, 20% Laboratory, 5% Student Presentation, 5% Field Trips, 5% Guest Speakers.
Grading: 25% mid exam, 25% final exam, 10% special projects, 15% quizzes, 10% in-class presentation, 15% laboratory evaluation. Students can receive a maximum total of 1100 points for the course, with 650 points associated with the lecture and 350-450 points with the laboratory. Up to 100 extra points can be earned from optional assignments.
Exam Format: mixture of multiple-choice, matching, short answer, and essay questions. Exams will be open-book with student access to the text, power-point presentation handouts and class notes.

Ent 3281 Veterinary Entomology
A-F only, 3 credit(s);
Instructor: Moon,Roger Dean
Description: Flies in the barn? Fleas on Fido? What are they, and from where do they come? Students in this class will learn how to identify the important arthropods around animals, learn about their biology and ecology, and learn about their effects on animals and people. Emphasis is on problem identification and solution. This course is designed for undergraduate biology, agriculture and pre-vet majors, and others who are interested in parasitology, animal management and care.
Style: 40% Lecture, 20% Discussion, 20% Laboratory, 20% Small Group Activities.
Grading: 30% final exam, 30% reports/papers, 30% quizzes, 10% attendance.
Exam Format: Two quizzes and final exam are by group testing, where students work out answers to take-home exam, and then work with semester group to compose group's answer. Grade is average of individual and group answers. Past students have liked group testing!

Ent 3925 Insects, Aquatic Habitats, and Pollution
A-F only, 3 credit(s);
Instructor: Ferrington Jr, Leonard Charles

Description: This course will focus on the effects differing classes of pollutants have on the biology, ecology and community structure of insects that are aquatic. It is intended for (1) upper level undergraduates with interests in ecology, limnology, natural resources management or conservation, and (2) first-year graduate students involved in research projects in Entomology, Water Resources, Fisheries and Wildlife, Conservation and/or Ecology and Evolutionary Biology. Topics to be covered will begin with a basic introduction to groups of insects that are aquatic and concepts related to their life-cycle dynamics, trophic guilds and community structure. Coverage will be given to hypotheses that attempt to explain community structure in both lotic (streams, rivers) and lentic (ponds, lake, reservoirs) settings. These lectures will be followed by lectures on organic pollution/eutrophication, heavy metal pollution, runoff and siltation, acidification, and thermal pollution. Changes in aquatic insect community structure will be discussed after reading an original literature source for each class of pollutant. Concluding lectures will deal with designing and maintaining biological monitoring networks to aid in decisions for water quality management. Copies of original data will be provided and hands-on, computer-based analyses of the data will give students experience in manipulating data and interpreting results. Weekly assignments will be based on data provided. The course will be web enhanced.

Style: 75% Lecture, 25% Discussion.

Grading: 20% mid exam, 30% final exam, 10% laboratory evaluation, 20% problem solving, 20% other evaluation. Completed design for a field research project

Exam Format: Combination of multiple choice and essay

Ent 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: Professional experience in entomology firms or government agencies through supervised practical experience; evaluative reports and consultations with faculty advisors and employers.

Ent 4251 Forest and Shade Tree Entomology
3 credit(s);
Instructor: Aukema, Brian Henry
Description: Is that stately ash in front of your grandparents' house scheduled for removal? Is your Christmas tree turning red instead of staying green? Is the forest from those great photos on your vacation out west in danger of going up in flames? Forest ecologists, urban and woodland foresters, horticulturalists, arborists, and resource managers face challenging yet essential tasks in being able to identify, diagnose, and manage insect challenges associated with trees. The number of invasive species, and multi-species complexes, is increasing every year. Join us as we learn identification, biology, and diagnosis of insect-caused damage associated with forest and shade trees, and examine the range of management options available, from the very simple and isolated to the very complex and widespread. No previous experience with insects is required.

Ent 5041 Insect Ecology
3 credit(s);
Instructor: Andow, David
Description: Student may contact the instructor or department for information.

Ent 5051 Scientific Illustration of Insects
3 credit(s);
Instructor: Holzenthal, Ralph W
Description: Student may contact the instructor or department for information.

Ent 5051 Scientific Illustration of Insects
3 credit(s);
Instructor: Holzenthal, Ralph W
Description: Student may contact the instructor or department for information.

Ent 5081 Insects, Aquatic Habitats, and Pollution
A-F only, 3 credit(s);
Instructor: Ferrington Jr, Leonard Charles
Description: This course will focus on the effects differing classes of pollutants have on the biology, ecology and community structure of insects that are aquatic. It is intended for (1) upper level undergraduates with interests in ecology, limnology, natural resources management or conservation, and (2) first-year graduate students involved in research projects in Entomology, Water Resources, Fisheries and Wildlife, Conservation and/or Ecology and Evolutionary Biology. Topics to be covered will begin with a basic introduction to groups of insects that are aquatic and concepts related to their life-cycle dynamics, trophic guilds and community structure. Coverage will be given to hypotheses that attempt to explain community structure in both lotic (streams, rivers) and lentic (ponds, lake,
reservoirs) settings. These lectures will be followed by lectures on organic pollution/eutrophication, heavy metal pollution, runoff and siltation, acidification, and thermal pollution. Changes in aquatic insect community structure will be discussed after reading an original literature source for each class of pollutant. Concluding lectures will deal with designing and maintaining biological monitoring networks to aid in decisions for water quality management. Copies of original data will be provided and hands-on, computer-based analyses of the data will give students experience in manipulating data and interpreting results. Weekly assignments will be based on data provided.

**Style:** 75% Lecture, 25% Discussion.

**Grading:** 25% mid exam, 25% final exam, 25% reports/papers, 25% class participation.

**Exam Format:** Combination of multiple choice and essay

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### Ent 5241 Ecological Risk Assessment

3 credit(s);

**Instructor:** Andow, David

**Description:**
Student may contact the instructor or department for information.

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### Ent 5351 Insect Pathology

2 credit(s);

**Instructor:** Kurtti, Timothy J

**Description:**
This course is an introduction to the diseases of pest and beneficial insects. The emphasis is on the biotechnology of entomopathogenic microbes and their application to microbial control of pest insects. The student will become familiar with the principles of insect pathology and the mechanisms of microbial pathogenesis. The textbook is “Insect Pathology” by Y. Tanada and H.K. Kaya. In addition, the student will read and critically analyze current papers. Oral presentations will be used to summarize these papers for the class. The students will also prepare a report on an entomopathogen of their choice. The objective of this report is to identify the strengths and weaknesses of the pathogen and the prospects for its implementation as a microbial insecticide or a biological control agent. Target audience: advanced undergraduate students in biology; graduate students in entomology, microbiology or ecology.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 20% mid exam, 30% final exam, 30% reports/papers, 20% in-class presentation.

**Exam Format:** Essay

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### Ent 5900 Basic Entomology

1-6 credit(s), max credits 12;

**Instructor:** STAFF

**Description:**
Opportunity to make up certain deficiencies in biological background.

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### Ent 5910 Special Problems in Entomology

1-6 credit(s), max credits 10, 10 completions allowed;

**Instructor:** STAFF

**Description:**
Individual field, lab, or library studies in various aspects of entomology.

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### Ent 5920 Special Lectures in Entomology

1 credit(s), max credits 3, 3 completions allowed;

**Instructor:** STAFF

**Description:**
Lectures or laboratories in special fields of entomological research given by a visiting scholar or regular staff member.

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### Ent 8061 Scientific Communication and Ethics

S-N only, 1 credit(s);

**Instructor:** Moon, Roger Dean

**Description:**
This class uses readings, discussions and exercises to develop skills that are critical for scientific communication, using an ethical framework. Students will learn to clearly and effectively communicate research findings and ideas to peers and the public, and be able to do so in different formats, including written manuscripts, posters, spoken presentations, grant proposals, and job interviews. Throughout discussions, students will identify and evaluate ethical issues that arise in professional communication. This course satisfies the ethics training requirement for graduate students at the University of Minnesota.

**Style:** 25% Lecture, 50% Discussion, 25% Small Group Activities.

**Grading:** 10% reports/papers, 45% attendance, 45% class participation.

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### Ent 8300 Graduate Seminar

S-N only, 1 credit(s);

**Instructor:** Moon, Roger Dean
**Description:** This course is intended for Entomology graduate students who need to satisfy their seminar requirement. Students in MS and PhD programs are required to present a thesis proposal seminar in a public seminar to the department. PhD students are also required to present an instructional seminar, where they are to review a non-thesis topic of their choice. Seminars of both kinds are usually scheduled and hosted as a part of the Entomology's Tuesday afternoon seminar series.

**Style:** 100% Student Presentation.

**Grading:** 100% reports/papers.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Fallon, Ann M
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Weller, Susan J.
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Krischik, Vera Aber
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Mesce, Karen A
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Munderloh, Ulrike G
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Andow, David
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Holzenthal, Ralph W
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Kurtti, Timothy J
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Ostlie, Kenneth R
- **Description:** Student may contact the instructor or department for information.

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**Ent 8594 Research in Entomology**

- **S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;**
- **Instructor:** Spivak, Marla
- **Description:** Student may contact the instructor or department for information.
Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Hutchison PhD, William D.
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Moon, Roger Dean
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Heimpel, George Eugene
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Ferrington Jr, Leonard Charles
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Kells, Stephen A
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Aukema, Brian Henry
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Tinerella, Paul P
Description: Student may contact the instructor or department for information.

Entrepreneurship 3-306 Carlson School of Management

Entr 6020 Business Formation
A-F only, 4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Entr 6021 Preparing and Implementing the Business Plan
A-F only, 2 credit(s), max credits 4, 1 completion allowed;
Instructor: Fine, Alan Raymond
Description: Student may contact the instructor or department for information.

Entr 6037 Corporate Venturing
A-F only, 2 credit(s);
Instructor: Pavone, Carla
Description: Student may contact the instructor or department for information.

Entr 6041 New Product Design and Business Development
A-F only, 2-4 credit(s), max credits 10, 3 completions allowed; MBA student
Credit will not be granted if credit has been received for: ME 8221;
Instructor: Durfee, William K
Description: See web site for course description.
Environmental Sciences, Policy, and Management 132 Skok Hall

ESPM 1001 Freshmen Orientation to Environmental Sciences, Policy, and Management
A-F only, 1 credit(s);
Instructor: Ferrington Jr, Leonard Charles
Description: This orientation class is for all freshmen admitted to the Environmental Sciences, Policy & Management degree program. The course consists of readings, presentations and panels by invited speakers, collaborative group activities and assignments. There is a mandatory field trip to Belwin Conservancy on Saturday 1 October 2011. Activities include: Academic planning, overviews of potential ESPM careers, liberal education requirements, internships and research opportunities. Additional goals include building relationships with other students/faculty, participating in student life, learning new information technology, and developing critical computer skills.

ESPM 1002 Transfer Orientation Seminar
A-F only, 1 credit(s);
Instructor: STAFF
Description: This required course provides orientation and guidance in planning for students transferring into the ESPM major. Course activities will describe careers, tracks within ESPM, and internships. Skill building provided includes information on searching for jobs and internships and writing of resumes.
Style: 60% Lecture, 40% Discussion.
Grading: 50% reports/papers, 50% other evaluation. Attendance and participation

ESPM 1011 Issues in the Environment
3 credit(s); Meets CLE req of Environment
Instructor: Blinn, Charlie
Description: We live in a crowded, complex world. The demands of the growing human population are putting dangerous pressure on our environment. How can we meet the needs of seven billion people without depleting the earth's resources and destroying its ecosystems? How can our own actions help or harm our planet? What are the social, political, and economic factors involved in environmental decision-making? We will explore topics including human population and consumption; the link between energy use, pollution, and climate change; the effect of land use decisions on the environment; the importance of biodiversity to ecosystem stability and human survival. The instructors and a variety of guest speakers will introduce topics on Mondays and Wednesdays. Fridays will be your turn to discuss your own ideas and to engage in a variety of small group activities. The course is intended for first-year students majoring in Environmental Sciences, Policy, and Management and for all students who are interested in the subject and wish to satisfy the University's liberal education requirements for Environment Theme. The course has no prerequisites and is suitable for students with little or no scientific background.
Style: 70% Lecture, 30% Discussion.
Grading: 60% mid exam, 35% written homework, 5% class participation.

ESPM 1425 The Atmosphere
A-F only, 4 credit(s); High school algebra Credit will not be granted if credit has been received for: GEOG 1425; Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Blumenfeld, Kenneth A
Description: Student may contact the instructor or department for information.

ESPM 1901 Topics: Freshman Seminar: Human Impact on the Environments: Then and Now
3 credit(s); Meets CLE req of Environment
Instructor: Bell, Jay
Description: Humans have had a profound effect on the environment throughout the history from our earliest civilizations until today. In this seminar we will examine how human activities have altered the earth by studying specific events in our past and of concern today. Examples include land degradation in ancient Mesopotamia, the draining of the Aral Sea, and the Dust Bowl. We will focus on the causes, attempted solutions, and long-term effects of human impact on the environment using examples from around the world (Australia, China, Russia, Morocco, and Antarctica) as well as what we find in our own backyards today. Topics will include an introduction to the earth as a system, global impacts (climate and land-use change), salinization, desertification, soil erosion, drastically disturbed lands, chemical contamination, and waste disposal. We will conclude with a brief examination of how we attempt to regulate human impacts on the environment today. The seminar will consist of two lecture/discussion and one group discussion session per week and will include library research to facilitate discussions.
Style: 25% Lecture, 5% Film/Video, 25% Discussion, 25% Small Group Activities, 5% Student Presentation, 5% Field Trips, 5% Guest Speakers, 5% Web Based.
Grading: 40% special projects, 20% written homework, 5% reflection paper, 30% class participation, 5% other evaluation. Grading is primarily based on weekly review of current literature on environmental topics of choice and participation in class discussions and
associated written reports
Exam Format: No exams

ESPM 1905 Freshman Seminar: Water Conflict and Sustainability
1 credit(s), max credits 3, 1 completion allowed;
Instructor: Dalzell, Brent James
Description: Despite the fact that water is one of the most abundant compounds on the surface of the Earth, this resource is under increasing risk of degradation and limitation as a result of Human activities and climate change. This course will identify and explore some of the key threats to water quality and sustainability around the world today. Topics discussed will be centered upon water sustainability from a Human perspective and will include both local and international examples of water quality degradation, water quantity depletion, and geopolitical conflicts (current and historic) where water plays an important role. Finally, we will explore how projected future climate change will impact future water sustainability. As a freshman seminar, this course will also include activities geared toward helping freshmen prepare to succeed in college. This includes activities that will help students identify their learning strengths and weaknesses as well as foster a learning environment that incorporates in-class discussions and group exercises. This class does not have a final exam.

ESPM 1905 Freshman Seminar: State of the World 2012
1 credit(s), max credits 3, 1 completion allowed;
Instructor: Cooper, Terence H
Description: Student may contact the instructor or department for information.

ESPM 2401 Environmental Education/Interpretation
3 credit(s);
Instructor: Carlson PhD, Stephan Paul
Description: Class Description: This course will take a foundational view of Environmental Education/Naturalist, its history, theories, methodologies, and practical skills for outdoor teaching with the aim to make students aware of the strengths and weaknesses of the Environmental Education field. Upon completion of this course a student should: 1. Know the historic “roots” of environmental education 2. Develop an understanding of interpretation/naturalist 3. Understand principles of environmental education. 4. Use basic ecology with real world applications for teaching. 5. Understand relationships among social and natural systems. 6. Apply investigative skills to solve EE problems. 7. Apply Awareness to Action, Environmental Education model. 8. Use parks and other natural/man-made settings to teach EE. 9. Apply Environmental Education to MN’s Graduation Standards. 10. Understand/Apply learning theory to teaching informal EE
Style: 60% Lecture, 40% Discussion.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 15% special projects, 5% quizzes, 15% in-class presentation, 5% class participation.
Exam Format: short answers, fill in the blank, matching, multiple choice essay and true/false

ESPM 3000 Seminar on Current Issues for ESPM: Essentials of Env Ldshp-Do YOU have what it takes?
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Stafford, Susan G
Description: Student may contact the instructor or department for information.

ESPM 3011W Ethics in Natural Resources
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Nerbonne, Julia Frost
Description: Many of you have entered degree programs with the intent of pursuing careers in resource management, research, or advocacy. Often, in our goal-oriented society, little time and thought is given to considering WHY we approach the natural world in the way we do. In this course, you will have the opportunity to explore the “why’s” that motivate humans to action. What are the fundamental value differences that cause intractable resource conflicts? How can leadership help people find win-win solutions? The course is designed to explore natural resource issues in the context of environmental ethics, conflict management, and leadership theory. During the course you will: - develop more fully your personal ethic regarding environmental issues, and practice articulating that ethic in discussion. - learn ethical theory and apply it to current environmental issues from forestry to wildlife, from animal rights to agriculture. - put your ethical understanding to work in a service learning project in the community. - refine your writing skills.

ESPM 3108 Ecology of Managed Systems
3 credit(s); BIOL 1001 or BIOL 1009 or HORT 1001 or instr consent Credit will not be granted if credit has been received for: ESPM 5108; Meets CLE req of Environment
Instructor: Jordan, Nicholas Royal
Description: Student may contact the instructor or department for information.
ESPM 3245 Sustainable Land Use Planning and Policy
A-F only, 3 credit(s); Jr or sr Credit will not be granted if credit has been received for: ESPM 5245; Meets CLE req of Environment
Instructor: Davenport, Mae Allen
Description: This course is designed to develop and refine student understanding of the principles, science and practice of sustainable land use planning and policy. Specifically, in the course students will (1) analyze interactions between the “three pillars of sustainability” in environmental planning and policy: ecology, economics, and equity, (2) identify and critically examine land use planning principles, processes and outcomes using planning case studies across the U.S., and (3) collaborate in teams on a planning sustainability assessment project. The course examines planning across local, state and federal levels at watershed, ecosystem, and landscape scales.

ESPM 3251 Natural Resources in Sustainable International Development
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 5251; Meets CLE req of Global Perspectives
Instructor: Current, Dean Alan
Description: International perspectives on resource use in developing countries. Integration of natural resource issues with social, economic, and policy considerations. Overviews of agriculture, forestry, agroforestry, non-timber forest products, water resources, certification, and development issues. Latin American focus but also includes case studies from other developing regions of the world.
Style: 40% Lecture, 25% Discussion, 15% Student Presentation, 20% Guest Speakers.
Grading: 35% in-class presentation, 5% class participation. 60% exams

ESPM 3261 Economics and Natural Resources Management
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: ESPM 5261; Meets CLE req of Environment; meets CLE req of Social Sciences
Instructor: Kilgore, Mike
Description: This course is designed to give students an understanding of and appreciation for the role economics plays in the management, use, and protection of natural resources. Its focus is to build student capacity to think critically about natural resources using economic decision-making criteria. The course emphasizes the practical application of economic principles and concepts to natural resource problems. The first third of the course focuses on developing an understanding of basic microeconomic concepts. The middle third of the course covers the tools and techniques used to value natural resources and evaluate natural resource projects using economic and financial criteria. The last third of the course extends these economic concepts, tools, and techniques to the management of various natural resources (e.g., forests, water). Prerequisite math skills for this course are limited to solving problems using algebra.
Style: 80% Lecture, 5% Small Group Activities, 15% Guest Speakers.
Grading: 33% mid exam, 25% final exam, 9% quizzes, 33% written homework.

ESPM 3271 Environmental Policy, Law, and Human Behavior
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences
Instructor: Nelson, Kristen
Description: Student may contact the instructor or department for information.

ESPM 3425 Atmospheric Composition: From Smog to Climate Change
A-F only, 3 credit(s);
Instructor: Millet, Dylan Baird
Description: What is the composition of the atmosphere, and why is it changing? In this class we'll examine the processes governing the makeup of Earth's atmosphere and their implications for air pollution, climate, and human welfare. Evolution of the atmosphere; atmospheric structure and transport; biogeochemical cycles of carbon, nitrogen, oxygen, mercury; the greenhouse effect; aerosols; stratospheric ozone loss; oxidizing power of the atmosphere; smog. Cross-listed as ESPM 3425 and ESci 3425. The movie below shows the 2009 ozone hole over Antarctica [credit: NASA]. Prerequisites: CHEM 1021/1022, PHYS 1011, MATH 1271, or equivalents, or instructor consent.

ESPM 3601 Sustainable Housing--Community, Environment, and Technology
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HSG 3482; Meets CLE req of Technology and Society
Instructor: Seavey, Robert Thomas
Description: Perhaps you've noticed the high tech house on campus across from the Bell Museum. Will all housing be built with similar technologies in the future? Should it? Perhaps you've been in a neighborhood and wondered whether the residents ever see each other. How do housing practices and the choices we make about housing resources affect a sense of community? And what
about the new and incredibly efficient but expensive LED light bulbs: are they worth it? As population continues to grow and as environmental issues become more pressing, it has become increasingly clear that some housing practices and technologies are more sustainable than others, and in this course you will learn about the challenges and choices we all face in creating and maintaining housing. Historically, we have mostly allowed people to do what they want on their own property, and to build without much thought to how natural events impact communities, but does this freedom carry an unsustainable cost to the surrounding environment, and to our communities? Housing is a basic necessity, and the knowledge you gain in this course is something you will use for the rest of your life.

ESPM 3603 Environmental Life Cycle Analysis
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: MGMT 3603;
Instructor: Hill, Jason David
Description: Life cycle assessment (LCA) is a tool used in understanding the cradle-to-grave environmental impacts of products, processes, and policies. Students will learn LCA methodology, including goal and scope definition, inventory analysis, impact assessment, interpretation, and application. The course will be taught using numerous case studies. Students will have the opportunity to apply the LCA methodology they learn in lectures, discussions, and other in-class activities to the preparation of a group project on a topic of their choosing.

ESPM 3604 Environmental Management Systems and Strategy
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 5604;
Instructor: Smith, Tim
Description: Environmental threats and opportunities are becoming increasingly important for business. Environmental problems such as climate change, ozone depletion and loss of biodiversity have become important national and international issues. Governments continue to adopt regulations and standards which influence industrial activity on a daily basis. Banks, insurance companies and other investors have become conscious of liabilities imposed by improper handling of materials and contamination of property. Suppliers and customers are also setting their own requirements. With the advent of the Business Charter on Sustainable Development, the European Environmental Management and Audit Scheme and the ISO series of environmental standards, companies are responding to these challenges by establishing structured environmental management systems. This course provides a theoretical and practical framework for understanding and evaluating environmental impacts within business scenarios. The course enables students to effectively assess the strategic and tactical processes associated with environmental, business and policy trends facing today's organizations.
Style: 60% Lecture, 20% Discussion. student presentations and group projects
Grading: 20% reports/papers, 40% special projects, 10% quizzes, 10% class participation, 20% other evaluation. mid-semester exam(s)
Exam Format: multiple choice, essay, short answers

ESPM 3605 Recycling: Extending Raw Materials
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 5605; Meets CLE req of Technology and Society
Instructor: McComas, Cindy Ann
Description: Student may contact the instructor or department for information.

ESPM 3606W Pollution Prevention: Principles, Technologies, and Practices
A-F only, 3 credit(s); CHEM 1011 or [CHEM 1015, CHEM 1017] or instr consent Credit will not be granted if credit has been received for: ESPM 5606; Meets CLE req of Writing Intensive
Instructor: McComas, Cindy Ann
Description: More than ever before, companies are focused on achieving high levels of environmental performance through pollution prevention and sustainable business practices. Industrial facilities use raw materials to produce products and release or emit pollutants and wastes. This waste production has many implications for companies including compliance with environmental regulations, cost of disposal, impacts to human health and the environment, and pollution control technologies to treat wastes. In this class, students will learn ways that industries can reduce their industrial waste and emissions and associated costs through pollution prevention practices. Students will be introduced to pollution prevention concepts and technical and cost analysis tools to assess pollution prevention opportunities in a company setting. The pollution prevention assessment project and report will help meet the writing requirements of this writing intensive class. Real world industrial case studies will be presented and students given an opportunity to solve one business case. The class will demonstrate how pollution prevention is fundamental to sustainability, resource efficiency, design-for-the-environment, product stewardship, green chemistry, and life cycle management. The course will consist of (1) instructor lectures, (2) guest speakers from industry, (3) hands-on exercises and group activities, (4) writing exercises, and 5) pollution prevention field assessment, and 6) tour of an industrial facility.
Style: 45% Lecture, 20% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Demonstration, 5% Field Trips, 10% Guest Speakers. Student presentations and group works
Grading: 30% mid exam, 20% reports/papers, 10% special projects, 20% written homework, 10% in-class presentation, 10% class participation.

ESPM 3612W Soil and Environmental Biology
3 credit(s);Meets CLE req of Writing Intensive
Instructor: Allan, Deborah L
Description: Student may contact the instructor or department for information.

ESPM 4041W Problem Solving for Environmental Change
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Nelson, Kristen
Description: Each year students in ESPM 4041W work with a "community" as a client to achieve goals outlined in the community's comprehensive plan. To achieve the goals, tasks involving land use planning, energy audits, vegetation analysis and outreach education are most commonly assigned to student groups of four to six people. The task groups gather data relevant to the client's objectives, analyze the data and, based on the data, make recommendations for future use. Students will produce a final written report for the client, develop a formal presentation describing the findings, and present their findings to the community client.

ESPM 4061W Water Quality and Natural Resources
3 credit(s);Meets CLE req of Writing Intensive
Instructor: Perry, Jim
Description: The science and art of water quality decision making, with a strong international focus. We discuss ecology of aquatic ecosystems, how they are valuable to society, how they are changed by landscape management, and how we make informed decisions about that management. We rely heavily on case studies, impaired waters and the TMDL process, and student engagement in simulating water quality decision making.
Style: 30% Lecture, 30% Discussion, 25% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 20% special projects, 20% in-class presentation, 20% class participation.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Nelson, Kristen
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Current, Dean Alan
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Nerbonne, Julia Frost
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Perry, Jim
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Rosen, Carl Jay
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Cooper, Terence H
Description: Student may contact the instructor or department for information.
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Bleser, Claire Serieysoll
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Stafford, Susan G
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Snyder, Peter K
Description: Student may contact the instructor or department for information.

ESPM 4094 Directed Research
1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Eckman, Karlyn
Description: Student may contact the instructor or department for information.

ESPM 4094 Directed Research
1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Current, Dean Alan
Description: Student may contact the instructor or department for information.

ESPM 4094 Directed Research
1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Rosen, Carl Jay
Description: Student may contact the instructor or department for information.

ESPM 4094 Directed Research
1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Cooper, Terence H
Description: Student may contact the instructor or department for information.

ESPM 4096 Professional Experience Program: Internship
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Cuthbert, Francesca J
Description: Go to your Gold Pass account- left side to locate link to ESPM Internship form. Fill out form online and permission number will be sent to you.

ESPM 4096 Professional Experience Program: Internship
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Cooper, Terence H
Description: Go to your Gold Pass account- left side to locate link to ESPM Internship form. Fill out form online and permission number will be sent to you.

ESPM 4216 Contaminant Hydrology
A-F only, 2 credit(s);
Instructor: Gupta, Satish C
Description: Student may contact the instructor or department for information.

ESPM 4242 Methods for Environmental and Natural Resource Policy Analysis
A-F only, 3 credit(s); [3241 or equiv], [3261 or equiv], prereq jr or sr
Credit will not be granted if credit has been received for:
ESPM 5242
Instructor: Kilgore, Mike
Description: This course introduces students to methods and processes used to analyze environmental and natural resource policies and programs. Its emphasis is on the practical application of policy analysis to address contemporary natural resource problems, recognizing the politically-charged environment within which decisions over the use, management, and protection of these resources occurs. Specific student learning objectives of the course are to: 1) Develop an understanding of the role and responsibilities of the policy scientist/analyst in advancing knowledge and practice in environmental and natural resource decision-making. 2) Differentiate among methods used to synthesize knowledge, forecast results, assess programs, and evaluate outcomes of environmental and natural resource policies. 3) Gain an appreciation for the politics of environmental and natural resource policy analysis. 4) Be able to identify the basic components of a policy analysis study.
Style: 25% Lecture, 25% Discussion, 15% Small Group Activities, 5% Student Presentation, 25% Demonstration, 5% Guest Speakers.
Grading: 20% reports/papers, 40% special projects, 10% reflection paper, 10% in-class presentation, 20% other evaluation. Other evaluation includes 10% for presentations, and 10% for peer critiques of reports

ESPM 4295W GIS in Environmental Science and Management
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Jenks, Andrew Carl
Description: Application of spatial data inventory/analysis in complex environmental planning problems. Spatial data collection, database development methods including GPS, DLG, TIGER, NWI data, spatial analysis. Topics often identified by non-University partners. Operational knowledge of basic GIS is required, as covered in an introductory course such as FR3131 or GEOG3561.

ESPM 4601 Soils and Pollution
3 credit(s);
Instructor: Nater, Ed
Description: Student may contact the instructor or department for information.

ESPM 4608 Bioremediation
A-F only, 3 credit(s); [BIOL 1001 or BIOL 1009], CHEM 1011 Credit will not be granted if credit has been received for: BBE 5608;
Instructor: Schilling, Jonathan Scott
Description: Bioremediation is the use of organisms, often microbes or their enzymes, to detoxify contaminants either in the field (in situ) or in containment facilities (ex situ). This is a rapidly-growing field that also has a long tradition. This Bioremediation course aims to introduce the fundamentals, survey the discipline, and discuss contemporary applications. In the course, we will 1) define 'contaminants', sources and environmental fates, 2) characterize biological organisms, pathways and catalysts utilized in bioremediation, and 3) discuss site inspection practices, bioremediation technologies and application in real-world situations. Teaching will combine lectures with hands-on experiences. Students will also be assigned out-of-class projects (with worksheets) that will be either solo or in groups, and a short presentation will be required along with a short writing assignment.
Style: 60% Lecture, 20% Discussion. class projects
Grading: 45% mid exam, 15% final exam, 10% class participation, 30% problem solving.
Exam Format: multiple choice, short and long answer, diagnostics

ESPM 5061 Water Quality and Natural Resources
3 credit(s);
Instructor: Perry, Jim A
Description: Review and discussion of recent literature in field complements the material covered in ESPM 4061; co-attendance is required. 4061 also addresses the science and art of water quality decision making, with a strong international focus. We discuss ecology of aquatic ecosystems, how they are valuable to society, how they are changed by landscape management, and how we make informed decisions about that management. We rely heavily on case studies, impaired waters and the TMDL process, and student engagement in simulating water quality decision making. Workload is in addition to that listed for ESPM 4061W
Style: 10% Lecture, 60% Discussion, 30% Student Presentation.
Grading: 20% mid exam, 20% final exam, 30% in-class presentation, 30% class participation.

ESPM 5071 Ecological Restoration
4 credit(s);
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

ESPM 5108 Ecology of Managed Systems
A-F only, 4 credit(s); Sr or grad student Credit will not be granted if credit has been received for: ESPM 3108;
Instructor: Jordan, Nicholas Royal
Description: Student may contact the instructor or department for information.

ESPM 5242 Methods for Natural Resource and Environmental Policy
A-F only, 3 credit(s); [3241 or equiv], [3261 or equiv], [sr or grad student] Credit will not be granted if credit has been received for: ESPM 4242;
Instructor: Kilgore, Mike
Description: This course will introduce students to methods and processes used to analyze environmental and natural resource policies and programs. Its emphasis is on the practical application of policy analysis principles and concepts to address contemporary natural resource problems, recognizing the politically-charged environment within which decisions over the use, management, and protection of these resources occurs. Specific student learning objectives of the course are to: 1) Develop an understanding of the role and responsibilities of the policy scientist/analyst in advancing knowledge and practice in environmental and natural resource decision-making. 2) Differentiate among methods used to synthesize knowledge, forecast results, observe programs, and evaluate outcomes of environmental and natural resource policies. 3) Gain an appreciation for the politics of environmental and natural resource policy analysis. 4) Be able to identify the basic components of a policy analysis study.
Exam Format: Short Answer

ESPM 5245 Sustainable Land Use Planning and Policy
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ESPM 3245;
Instructor: Davenport, Mae Allen
Description: This course is designed to develop and refine student understanding of the principles, science and practice of sustainable land use planning and policy. Specifically, in the course students will (1) analyze interactions between the "three pillars of sustainability" in environmental planning and policy: ecology, economics, and equity, (2) identify and critically examine land use planning principles, processes and outcomes using planning case studies across the U.S., and (3) collaborate in teams on a planning sustainability assessment project. The course examines planning across local, state and federal levels at watershed, ecosystem, and landscape scales.

ESPM 5251 Natural Resources in Sustainable International Development
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ESPM 3251;
Instructor: Current, Dean Alan
Description: International perspectives on resource use in developing countries. Integration of natural resource issues with social, economic, and policy considerations. Overviews of agriculture, forestry, agroforestry, non-timber forest products, water resources, certification, and development issues. Latin American focus but also includes case studies from other developing regions of the world.
Style: 40% Lecture, 25% Discussion, 15% Student Presentation, 20% Guest Speakers.
Grading: 20% reports/papers, 20% in-class presentation, 10% class participation. 50% exams

ESPM 5261 Economics and Natural Resources Management
A-F only, 4 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ESPM 3261;
Instructor: Kilgore, Mike
Description: This course is designed to give students an understanding of and appreciation for the role economics plays in the management, use, and protection of natural resources. Its focus is to build student capacity to think critically about natural resources using economic decision-making criteria. The course emphasizes the practical application of economic principles and concepts to natural resource problems. The first third of the course focuses on developing an understanding of basic microeconomic concepts. The middle third of the course covers the tools and techniques used to value natural resources and evaluate natural resource projects using economic and financial criteria. The last third of the course extends these economic concepts, tools, and techniques to the management of various natural resources (e.g., forests, water). Prerequisite math skills for this course are limited to solving problems using algebra.
Style: 80% Lecture, 5% Small Group Activities, 15% Guest Speakers.
Grading: 33% mid exam, 25% final exam, 9% quizzes, 33% written homework.

ESPM 5295 GIS in Environmental Science and Management
A-F only, 4 credit(s);
Instructor: Jenks, Andrew Carl
Description: A 2nd course in GIS focusing on the application of spatial data inventory/analysis in complex environmental planning problems. Satisfactory completion of FR3131/5131 or equivalent is required. Spatial data collection, database development methods including GPS, DLG, TIGER, NWI data, spatial analysis. Topics identified by non-University partners.

ESPM 5402 Biometeorology
3 credit(s);
Instructor: Griffis, Timothy John
ESPM 5555 Wetland Soils
A-F only, 3 credit(s); 1125 or 2125 or equiv or instr consent; Concurrent registration is required (or allowed) in 4511 recommended
Credit will not be granted if credit has been received for: SOIL 5555;
Instructor: Nater, Ed
Description: Student may contact the instructor or department for information.

ESPM 5603 Environmental Life Cycle Analysis
A-F only, 3 credit(s);
Instructor: Hill, Jason David
Description: Life cycle assessment (LCA) is a tool used in understanding the cradle-to-grave environmental impacts of products, processes, and policies. Students will learn LCA methodology, including goal and scope definition, inventory analysis, impact assessment, interpretation, and application. The course will be taught using numerous case studies. Students will have the opportunity to apply the LCA methodology they learn in lectures, discussions, and other in-class activities to the preparation of a group project on a topic of their choosing.

ESPM 5604 Environmental Management Systems and Strategy
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 3604;
Instructor: Smith, Tim
Description: Environmental threats and opportunities are becoming increasingly important for business. Environmental problems such as climate change, ozone depletion and loss of biodiversity have become important national and international issues. Governments continue to adopt regulations and standards which influence industrial activity on a daily basis. Banks, insurance companies and other investors have become conscious of liabilities imposed by improper handling of materials and contamination of property. Suppliers and customers are also setting their own requirements. With the advent of the Business Charter on Sustainable Development, the European Environmental Management and Audit Scheme and the ISO series of environmental standards, companies are responding to these challenges by establishing structured environmental management systems. This course provides a theoretical and practical framework for understanding and evaluating environmental impacts within business scenarios. The course enables students to effectively assess the strategic and tactical processes associated with environmental, business and policy trends facing today’s organizations.
Style: 60% Lecture, 20% Discussion. Student presentations and group projects
Exam Format: multiple choice, essay, short answers

ESPM 5605 Recycling: Extending Raw Materials Supplies
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 3605;
Instructor: McComas, Cindy Ann
Description: Student may contact the instructor or department for information.

ESPM 5606 Pollution Prevention: Principles, Technologies, and Practices
A-F only, 3 credit(s); CHEM 1011 or [CHEM 1015, CHEM 1017] or instr consent
Credit will not be granted if credit has been received for: ESPM 3606W;
Instructor: McComas, Cindy Ann
Description: Industrial facilities use raw materials and resources and emit pollutants and wastes. The raw materials and resources used are converted into various forms of pollution through industrial operations. Both purchasing the input materials used and treating and disposing of the pollutants and wastes generated represent costs to a company. In this class, the methods by which a company can reduce both input materials and pollution and wastes are covered including better management, process and product modification, use of alternative materials and redirecting materials and energy flows. The course is comprised of (1) Overview of industrial emissions and the technologies to treat and reduce them, (2) Pollution prevention planning and implementation, (3) A field trip to a company, (4) Presentations on the industrial pollution prevention practices and (5) Group assessment project.
Style: 60% Lecture, 20% Discussion. Student presentations and group works
Grading: 20% mid exam, 20% reports/papers, 50% special projects, 10% class participation.

ESPM 5608 Bioremediation
A-F only, 3 credit(s); [BIOL 1001 or BIOL 1009], CHEM 1011 Credit will not be granted if credit has been received for: ESPM 4608;
Instructor: Schilling, Jonathan Scott
Description: Bioremediation is the use of organisms, often microbes or their enzymes, to detoxify contaminants either in the field (in situ) or in containment facilities (ex situ). This is a rapidly-growing field that also has a long tradition. This Bioremediation course aims to introduce the fundamentals, survey the discipline, and discuss contemporary applications. In the course, we will 1) define
'contaminants', sources and environmental fates, 2) characterize biological organisms, pathways and catalysts utilized in bioremediation, and 3) discuss site inspection practices, bioremediation technologies and application in real-world situations. Teaching will combine lectures with hands-on experiences. Students will also be assigned out-of-class projects (with worksheets) that will be either solo or in groups, and a short presentation will be required along with a short writing assignment.

**Style:** 60% Lecture, 20% Discussion. class projects

**Grading:** 45% mid exam, 15% final exam, 10% class participation, 30% problem solving.

**Exam Format:** multiple choice, short and long answer, diagnostics

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### Experimental and Clinical Pharmacology 7-159 WDH

**ECP 5290 Clinical Clerkship**
- 1-8 credit(s), max credits 16, 16 completions allowed;
- **Instructor:** Kriel MD, Robert L.
- **Description:** Student may contact the instructor or department for information.

**ECP 8100 Seminar**
- 1 credit(s), max credits 8, 8 completions allowed;
- **Instructor:** Lamba, Jatinder K
- **Description:** Student may contact the instructor or department for information.

**ECP 8200 Research Problems**
- 1-8 credit(s), max credits 16, 16 completions allowed;
- **Instructor:** Brundage, Richard
- **Description:** Student may contact the instructor or department for information.

**ECP 8400 Pharmacometrics**
- 3 credit(s);
- **Instructor:** Brundage, Richard
- **Description:** Student may contact the instructor or department for information.

**ECP 8410 Population Pharmacokinetic Modeling**
- A-F only, 2 credit(s);
- **Instructor:** Brundage, Richard
- **Description:** Student may contact the instructor or department for information.

**ECP 8430 Advances in Pharmacometrics Modeling and Simulation**
- S-N only, 1 credit(s), max credits 6, 6 completions allowed;
- **Instructor:** Brundage, Richard
- **Description:** Student may contact the instructor or department for information.

**ECP 8900 Advanced Topics in Experimental and Clinical Pharmacology: Principles of Clinical Pharmacology**
- 1-4 credit(s), max credits 8, 4 completions allowed;
- **Instructor:** Kirstein, Mark Noel
- **Description:** Student may contact the instructor or department for information.

**ECP 8900 Advanced Topics in Experimental and Clinical Pharmacology**
- 1-4 credit(s), max credits 8, 4 completions allowed;
- **Instructor:** Lamba, Vishal
- **Description:** Student may contact the instructor or department for information.

**ECP 8992 Directed Readings in Experimental and Clinical Pharmacology**
- 1-2 credit(s), max credits 4, 4 completions allowed;
- **Instructor:** Peterson, Marnie Lorraine
- **Description:** Student may contact the instructor or department for information.

**ECP 8993 Directed Study in Experimental and Clinical Pharmacology**
- 1-4 credit(s), max credits 4;
- **Instructor:** Brundage, Richard
Description: Student may contact the instructor or department for information.

ECP 8993 Directed Study in Experimental and Clinical Pharmacology
1-4 credit(s), max credits 4;
Instructor: Birnbaum PhD, Angela K
Description: Student may contact the instructor or department for information.

ECP 8993 Directed Study in Experimental and Clinical Pharmacology
1-4 credit(s), max credits 4;
Instructor: Jacobson, Pamala Ann
Description: Student may contact the instructor or department for information.

ECP 8993 Directed Study in Experimental and Clinical Pharmacology
1-4 credit(s), max credits 4;
Instructor: Brundage, Richard C
Description: Student may contact the instructor or department for information.

Family Medicine and Community Health

6-240 Phillips-Wangensteen (MMC 381)

Family Medicine and Community Health

FMCH 5960 Basic Research Methods in Family Practice
A-F only, 3 credit(s);
Instructor: Yeazel, Mark William
Description: Student may contact the instructor or department for information.

FMCH 5961 Family Medicine Fellows and Junior Faculty Integration Seminar
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Bland, Carole Jeanne
Description: Student may contact the instructor or department for information.

Family Social Science

290 McNeal Hall

FSoS 1101 Intimate Relationships
4 credit(s); Meets CLE req of Social Sciences
Instructor: Mendenhall PhD, Tai Justin
Description: Intimate Relationships is a course that focuses on the interpersonal dynamics of couples, and on the dynamics of couples in-context. We will explore how intimate relationships evolve and develop, and how they succeed or fail. We will talk about a variety of important relationship topics and skills, including dating, hooking-up, cohabitation, marriage, sexual orientation, gender roles & power, communication & conflict resolution, relationship problems (e.g., abuse, infidelity, divorce), and couple-enrichment/couples therapy. The course's principal goal is to provide an overview of these and related topics, and to help you gain a deeper appreciation and awareness of their importance.
Style: 50% Lecture, 10% Film/Video, 20% Discussion, 20% Small Group Activities.
Grading: 33% final exam, 33% reports/papers, 33% quizzes.
Exam Format: Multiple Choice + Essay

FSoS 1301 Cash or Credit: You Need to Know
A-F only, 1 credit(s);
Instructor: Zuiker, Virginia Solis
Description: College students are referred to as “America's newest class of debtors” by the media. They are targeted for easy-to-get credit cards and also may have large student loans. FSoS 1301 is a course that provides PSEO students, freshmen and sophomore students with factual information about basic money management skills. The great thing about this class is that the topics covered in class can be applied to every day life, even the life that exists outside of college. This is an on-line, interactive learning based class.
Style: 100% Web Based. Distance Learning, web-based
Grading: 40% reports/papers, 60% quizzes.
Exam Format: Multiple choice True and False

FSoS 2101 Preparation for Working With Families
A-F only, 2 credit(s);
Instructor: Goodman, William Joseph
Description: This course is designed to be a systematic preparation for upper division education, research and field internships, and career possibilities in Family Social Science. Central to the focus of this course is also the advancement of students' thinking power by utilizing five levels of thinking outlined by Bloom, 1956. These five levels: knowledge, comprehension, application, analysis, evaluation, and synthesis are used in responding to the course text, "Becoming a Helper" by Marianne and Gerald Corey (2007) and workbook assignments. Book and class topics include the following: Are the Helping Professions for You? Getting the Most from Your Education and Training, Stages in the Helping Process, Common Concerns of Beginning Helpers, Ethical Issues Facing Helpers, Values and the Helping Relationship, Cultural Diversity in the Helping Professions, Working in the Community, Working with Groups, Working with the Family, Understanding Life Transitions, Stress and Burnout, and The Challenge of Retaining Your Vitality. To review course requirements, goals and objectives, and additional information about this course, students are encouraged to view the syllabus on the WEB.

Style: 20% Lecture, 40% Discussion, 20% Laboratory.

Grading: PLEASE NOTE that this course uses Contract Grading.

FSoS 2103 Family Policy
3 credit(s);
Instructor: Magistad,Beth Maddock
Description: This course will explore the reciprocal linkages between family functioning and public/private policies at the local, state, and federal levels. The course will focus on theoretical frameworks for conceptualizing family policy and roles professionals can play in building and implementing family policy. Students will explore how families contribute to social problems, how families are affected by these problems, and whether families should be involved in policy solutions. Students will assess the consequences policies may have for family well-being with special attention to selected family policy issues. Course Philosophy: My intent is to engage students in the topic of family policy and to enable family policy to come alive and be seen as real and relevant to the personal and professional lives of the students. I do not intend to have the students complete the class espousing my political views, but rather to explore more fully a range of political perspectives in an attempt to determine their own views on current family issues. Students are evaluated on their ability to articulate a particular view, identify its theoretical underpinnings, support it with empirical findings, and refute alternative views.

Style: 35% Lecture, 5% Film/Video, 20% Discussion, 20% Small Group Activities, 10% Guest Speakers.

Grading: 26% reports/papers, 30% special projects, 13% quizzes, 16% written homework, 10% class participation.

FSoS 2105 Methods in Family Research
3 credit(s);PSTL 1004 or STAT 1001 or OMS 2550 or ESPY 3264 or STAT 3011 or PSY 4801 or instr consent Credit will not be granted if credit has been received for: FSOS 4105;
Instructor: Rueter,Martha A
Description: This course is designed to give you the opportunity to develop the skills you need to be an intelligent consumer of scientifically based information about families. Topics covered include how to access current research on families, the scientific process and components of a well-executed family study, and social, ethical, and contextual factors that make studying families both exciting and challenging.

Style: 35% Lecture, 20% Discussion, 20% Small Group Activities, 25% Guest Speakers.

Grading: 30% mid exam, 30% final exam, 40% written homework.

FSoS 2191 Independent Study in Family Social Science
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: The independent study course is for field, library, and laboratory research in family social science. The topics, course content, and readings for the course are developed under the guidance of the supervising faculty member. Prior registration approval is necessary.

FSoS 3101 Personal and Family Finances
3 credit(s);
Instructor: Solheim,Catherine Ann
Description: The importance of financial management is recognized for its major impact on quality of life for individuals and families. This course focuses on personal and family finances, not corporate or government finances. College students’ unique financial challenges and their related decisions will be considered as they impact credit ratings and debt accumulation, two areas in which less than optimal decision-making often results in long-term financial stress.

Style: 20% Lecture, 5% Film/Video, 15% Discussion, 30% Small Group Activities, 5% Guest Speakers, 25% Web Based. Team-based learning in active learning classroom; students at tables - interact in teams of 3 to solve problems, apply course concepts, discuss. Attendance required for successful course completion

Grading: 25% final exam, 27% special projects, 5% quizzes, 25% additional semester exams, 5% class participation, 13% problem solving. Class participation = on-line discussions Three exams plus comprehensive final exam Problem solving = case studies Special project = personal financial planner
**FSoS 3101 Personal and Family Finances**  
3 credit(s);  
Instructor: Zuiker, Virginia Solis  
Description: This course is an analysis of personal and family financial management principles. Students will learn concepts pertaining to the financial planning of savings, investments, credit, mortgages, taxation, life, disability, health, and property insurance; public, private pensions, and estate planning. This course focuses on personal and family finances, not corporate or government finances. It is designed to be applicable to the student's personal life decisions and his/her professional role. This course will address financial pitfalls, economic security, and ways to accumulate wealth. Undergraduate students, students majoring in Family Social Science, and students from other majors are welcome to and could learn from this class.  
Style: 25% Lecture, 25% Discussion. Guest speaker  
Grading: 26% mid exam, 32% final exam, 10% quizzes, 32% other evaluation. Personal financial portfolio  
Exam Format: multiple choice

**FSoS 3102 Family Systems and Diversity**  
3 credit(s); At least soph or instr consent Credit will not be granted if credit has been received for: FSOS 5101; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences  
Instructor: Xiong PhD, Zha Blong  
Description: This course examines family systems across the lifespan using a variety of family theories (i.e., the family systems theory, the human ecology theory, the family development theory, etc.). It introduces students to diversity issues related to gender, class, ethnicity/race, sexual orientation, disability, as well as emergent family forms (i.e., cohabitation, divorce, single parenthood, and remarriage) in the context of the latest research.  
Style: 50% Lecture, 15% Film/Video, 10% Discussion, 25% Small Group Activities.  
Grading: 26% mid exam, 26% final exam, 28% reports/papers, 13% quizzes, 6% written homework.

**FSoS 3102 Family Systems and Diversity**  
3 credit(s); At least soph or instr consent Credit will not be granted if credit has been received for: FSOS 5101; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences  
Instructor: Hemesath, Karla  
Description: This course examines family systems across the lifespan using a variety of family theories (i.e., the family systems theory, the human ecology theory, the family development theory, etc.). It also introduces students to diversity issues related to gender, class, ethnicity/race, sexual orientation, disability, as well as emergent family forms (i.e., cohabitation, divorce, single parenthood, and remarriage) in the context of the latest research.  
Style: 60% Lecture, 20% Film/Video, 15% Discussion, 5% Small Group Activities.  
Grading: 15% final exam, 20% reports/papers, 20% quizzes, 45% additional semester exams.  
Exam Format: Four exams are given during the course. Each exam is worth 75 points or (15%) of total grade. Exams consist of multiple choice, matching, and short answer answer questions.

**FSoS 3104 Global and Diverse Families**  
3 credit(s); at least Soph or instr consent Credit will not be granted if credit has been received for: FSOS 4102; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences  
Instructor: Xiong PhD, Zha Blong  
Description: This course focuses on family dynamics of various racial/ethnic populations across the world, including the United States, in the contexts of global economic, political and socio-cultural processes. The course introduces students to a variety of theoretical frameworks (i.e., cultural variant vs. cultural deviant, family ecological) to question, examine, and understand the interdependence of family, kin, racial, cultural, class, communal, educational, social, religious, political and economic systems within and across countries. In addition, it also helps students to recognize personal, social, cultural, mass media, and other barriers to understand and work with global and diverse families. Course Objectives/Goals: a. To know the basics for understanding the family life of people in various cultures and various racial/ethnic groups as they might understand it themselves. b. To recognize personal, social, cultural, mass media, and other barriers to understanding the family life of people in various cultural, racial and ethnic groups. c. To recognize key ways family and kin are important to people in various cultural, racial and ethnic and class groups. d. To understand key dynamics and effects on families of various 'isms' (racism, sexism, ethnocentrism, ageism, heterosexism), privilege, discrimination, obliviousness and ignorance. e. To understand key effects of families around the world of governmental policies of the U.S. and of other international governments. f. To understand important elements and consequences of personal and institutionalized racism.  
Style: 50% Lecture, 15% Film/Video, 10% Discussion, 15% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.  
Grading: 14% mid exam, 14% final exam, 21% reports/papers, 7% quizzes, 28% additional semester exams, 6% attendance, 10% reflection paper. Extra credit assignments worth up to 20 points will be assigned to students to complete throughout the semester.  
Exam Format: All exams include multiple choice and true/false items only.
FSoS 3104 Global and Diverse Families
3 credit(s); at least Soph or instr consent Credit will not be granted if credit has been received for: FSOS 4102; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Senyurekli, Aysem Ruchan
Description: Student may contact the instructor or department for information.

FSoS 3191 Independent Study in Family Social Science
1-5 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: The independent study course is for field, library, and laboratory research in family social science. The topics, course content, and readings for the course are developed under the guidance of the supervising faculty member. Prior registration approval is necessary.

FSoS 3426 Alcohol and Drugs: Families and Culture
3 credit(s); Credit will not be granted if credit has been received for: FSOS 5426;
Instructor: Jankord, John Lamont
Description: This survey course provides an introduction to the psychology and sociology of psychoactive drug use, abuse, and addiction, in contemporary American society. While this is not a skill development or clinical course, the relationships between individual, family, and socio-cultural dimensions of drug using behavior will be explored. The bio-psycho-socio-spiritual model is used to conceptualize addiction. Special attention is given to variables of ethnicity, gender, sexuality, and social class. Lectures, readings, large and small group discussions, and individual research and writing projects are used to advance student knowledge and understanding.
Style: 25% Lecture, 20% Film/Video, 25% Discussion, 15% Small Group Activities, 15% Guest Speakers.
Grading: 14% mid exam, 14% final exam, 14% reports/papers, 6% special projects, 8% attendance, 14% journal, 14% reflection paper, 7% in-class presentation, 9% class participation.

FSoS 3429 Counseling Skills Practicum I
3 credit(s); Credit will not be granted if credit has been received for: FSOS 5429;
Instructor: Meyer, Cynthia Jo
Description: This course is designed to provide students the listening skills necessary to establish a helping relationship and to promote the personal growth and development of people they will see in their future work. It helps students develop skills that are critical in helping other people, including individuals, couples and families. Through class lecture, practice, written exercises, and discussion, this course focuses both on self-awareness about one's desire to help others as well as developing basic skills in helping others.
Style: 50% Lecture, 20% Discussion. skills practice
Grading: 30% final exam, 25% reports/papers, 10% special projects, 15% class participation, 20% other evaluation. Homework assignments
Exam Format: multiple choice and short essay

FSoS 4101 Sexuality and Gender in Families and Close Relationships
3 credit(s);
Instructor: Meyer, Cynthia Jo
Description: Sexuality and Gender in Families and Close Relationships provides students an opportunity to learn about current research in the field of sexuality, develop comfort applying this information in professional settings, utilize and develop critical thinking skills to examine evidence and biases in the field of sexual science, and to clarify and confirm sexual values as well as understand the impact these values have on one's personal and professional relationships. A variety of topics will be covered including family communication and sexuality education, body image, gender development and development of gender roles, sexuality research, developing healthy sexuality in children, adolescent sexuality, attraction and intimacy, mate selection and other sexuality related topics
of importance to relationships and families

Style: 60% Lecture, 30% Discussion. small group presentations and film

Grading: 30% mid exam, 30% final exam, 20% reports/papers, 10% special projects, 10% class participation.

Exam Format: multiple choice

FSoS 4104W Family Psychology
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Von Korff, Lynn

Description: This course addresses family processes taking place in families of origin, families of choice, and other close relationships in diverse social contexts. Course content is geared to students who have studied family theory and research methods. This is a Writing Intensive course. Family psychology takes place in a landscape of written language. Family clinicians use their knowledge of family theory and research to write descriptive and evaluative case reports. Family educators synthesize and translate research for practical use by parents, teachers, and policy makers. Family social scientists produce research reports to move the field forward, informing practice and family life. In each situation, writing is tailored to an intended audience for a specific purpose. This course has a variety of formal and informal writing assignments. Assignments are based on the premise that writing is thinking, writing is a process that requires feedback and revision, and writing is both discipline and audience specific. At the completion of this course, you should be able to: 1. Use theory to analyze families and family relationships 2. Describe how the study of family psychology differs from individual psychology 3. Identify and write critically about family psychology 4. Read and analyze research articles 5. Synthesize theory and scholarly evidence to defend a thesis 6. Recognize and appreciate the ways diversity affects family psychology research and clinical practice

Style: 30% Lecture, 5% Film/Video, 25% Discussion, 20% Small Group Activities, 5% Student Presentation, 5% Demonstration, 10% Guest Speakers.

Grading: 45% reports/papers, 10% special projects, 24% quizzes, 5% in-class presentation, 16% class participation. "clicker" assessments require class participation, reading, and attendance.

FSoS 4106 Family Resource Management
3 credit(s);
Instructor: Magistad, Beth Maddock

Description: The course examines families as important economic units in society. The content focuses on the family economic activities of management, production, consumption, investment, exchange, allocation, and distribution. These economic activities assist families in reaching levels of living that bring varying degrees of life quality for family members. The course emphasis is placed on the managerial activities of low-income families and selected public policies that directly influence their economic well being. Management involves facing opportunities and solving the practical problems of every-day life, coordinating the activities of family members, and making and implementing decisions. Some challenges include how to allocate time in ways that will: produce capable people; distribute income to meet the safety and growth needs of family members; consume material resources for health of members and the environment; and use community resources in ways that will assist family members in realizing valued ends, and reaching important goals.

Style: 50% Lecture, 5% Film/Video, 20% Discussion, 20% Small Group Activities, 5% Guest Speakers.

Grading: 40% mid exam, 20% final exam, 30% reports/papers, 5% in-class presentation, 5% class participation.

FSoS 4153 Family Financial Counseling
A-F only, 3 credit(s);
Instructor: Zuiker, Virginia Solis

Description: Family financial issues are studied with an emphasis on the role of the financial counselor. This course emphasizes the development of professional skills for assisting individuals and families to cope with financial concerns in their day-to-day lives.
course is designed to increase awareness and knowledge of the characteristics of persons in serious financial difficulties, complexity of factors affecting such situations, desirable relationships between the helper and the helped, and community agencies and organizations with appropriate resources. A basic knowledge of family finance is expected. Students completing this course are eligible to take the Accredited Financial Counselor (AFC) exam administered by the Institute for Personal Finance (IPF). Successful completion of the two courses does not equate passing the Accredited Financial Counselor exam.

**Style:** 40% Lecture, 5% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Guest Speakers, 5% Web Based.

**Grading:** 41% mid exam, 20% reports/papers, 27% written homework, 12% class participation.

**FSoS 4155 Parent-Child Relationships**
- **A-F only, 3 credit(s);**
- **Instructor:** Magistad, Beth Maddock
- **Description:** This course will cover history, theories, research, and contemporary practices of parent-child relationships in diverse families across the life span. Students will apply theories studied in class to parent-child observations. The course helps to prepare students for professional work in education, social work and other human service occupations as well as to examine parenting from a personal perspective.

**Style:** 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Student Presentation.

**Grading:** 13% mid exam, 13% final exam, 15% reports/papers, 15% special projects, 8% written homework, 26% additional semester exams, 2% in-class presentation, 7% class participation.

**Exam Format:** Multiple choice

**FSoS 4160H Honors Capstone Project**
- **A-F only, 2 credit(s), max credits 4;**
- **Instructor:** STAFF
- **Description:** Individualizes the honors experience by connecting aspects of major program with special academic interests.

**FSoS 4191 Independent Study in Family Social Science**
- **1-4 credit(s), max credits 12, 12 completions allowed;**
- **Instructor:** STAFF
- **Description:** The independent study course is for field, library, and laboratory research in family social science. The topics, course content, and readings for the course are developed under the guidance of the supervising faculty member. Prior registration approval is necessary.

**FSoS 4294 Research Internship**
- **1-4 credit(s), max credits 4, 1 completion allowed;**
- **Instructor:** STAFF
- **Description:** Students work on research projects with Family Social Science faculty that may include research planning, proposal writing, literature review, data collection, data coding and/or cleaning, data analysis and research reporting.

**FSoS 4296 Field Study: Working With Families**
- **S-N only, 1-12 credit(s), max credits 12, 4 completions allowed;**
- **Instructor:** Goodman, William Joseph
- **Description:** This course consists of 180 hours of directed paraprofessional work experience related to the student's applied interest. While the unit of focus is on families throughout this course, student involvement in agencies may range from working with the Minnesota State Legislature (Family Policy) to Family Financial Counseling (Family Economics) to Nursing Homes (Family Health Care). A multitude of Minnesota State, National, and International social service agencies are utilized in providing students with an experience that best advances their thinking and working. This course is further designed to integrate the whole of a student's undergraduate work by requiring students to complete a professional portfolio suitable for use during job interviews upon graduation. To review course requirements, goals and objectives, and additional information about this course, students are encouraged to view the syllabus on the WEB. This course is for Family Social Science undergraduate majors only.

**Style:** 100% Discussion.

**Grading:** 5% in-class presentation, 5% laboratory evaluation, 90% other evaluation.

**FSoS 5193 Directed Study in Family Social Science**
- **1-6 credit(s), max credits 6, 1 completion allowed;**
- **Instructor:** STAFF
- **Description:** The directed study course is for field, library, and laboratory research in family social science. The topics, course content, and readings for the course are developed under the guidance of the supervising faculty member. Prior registration approval is necessary.
FSoS 5429 Counseling Skills Practicum I
3 credit(s); Credit will not be granted if credit has been received for: FSOS 3429;
Instructor: Meyer, Cynthia Jo
Description: This course is designed to provide students the listening skills necessary to establish a helping relationship and to promote the personal growth and development of people they will see in their future work. It helps students develop skills that are critical in helping other people, including individuals, couples and families. Through class lecture, practice, written exercises, and discussion, this course focuses both on self-awareness about one's desire to help others as well as developing basic skills in helping others.
Style: 50% Lecture, 20% Discussion. skills practice
Grading: 30% final exam, 25% reports/papers, 10% special projects, 15% class participation, 20% other evaluation. Homework assignments
Exam Format: multiple choice and short essay

FSoS 5900 Special Topics in Family, Youth, and Community
1 credit(s), max credits 20, 20 completions allowed;
Instructor: Bowman, Ted W
Description: Family Education has historically emphasized the family in context, that is, through systemic or holistic lenses. Since grief and loss are a part of life, they must also be addressed. Families experience losses related to health, roles, relationships, material items, even life itself. For many, such experiences also include loss of the imagined future, the loss of significant dreams. In this applied class, participants will: 1) be presented with, discuss and demonstrate knowledge of frameworks for identifying and clarifying losses, 2) demonstrate an ability to apply course content in ways that are consistent with best practice in parent and family education settings, 3) recognize situations in which alternative resources are needed and referral is warranted.

FSoS 5902 Family Education Perspectives
A-F only, 3 credit(s);
Instructor: Englund, Lynn A.
Description: Students in family education (and those who will have professional roles working with families) will examine and appreciate the multiple avenues through which family education has occurred across human history and cultures. Students seek out alternative perspectives of family education by reading historic in articles and documents to deduce underlying motivations and interests, cultural and historical contexts, philosophical orientations, assumptions, and values associated with family education. Students will also study the nature of practical problems encountered by families in their everyday functioning as families. The will consider what family education's perspective should be regarding the nature of these problems and discuss the implications and consequences related to the research and application of family education for programs, educators, and families, and society. Students will formulate and/or clarify their personal perspective of family education. Only the online Web-based section of the course will be offered. Microphone for audio recording is required. No camera/video capability is required.
Style: 100% Web Based.
Grading: 10% reports/papers, 16% reflection paper, 70% class participation, 4% other evaluation. All class participation is conducted online using web and audio (microphone required). No video camera capability is required.

FSoS 5932 Introduction to Parent Education
A-F only, 1 credit(s);
Instructor: STAFF
Description: Overview of the philosophy, history, and models of parent education; introduction to ethical and critically reflective professional practice.

FSoS 5937 Parent-Child Interaction
A-F only, 3 credit(s);
Instructor: Cline, Heather Marie
Description: Student may contact the instructor or department for information.

FSoS 5944 Parent Education Curriculum
A-F only, 2 credit(s);
Instructor: Brown, Michael Patrick
Description: Student may contact the instructor or department for information.

FSoS 5945 Teaching and Learning in Parent Education
A-F only, 2 credit(s);
Instructor: Brown, Michael Patrick
Description: Student may contact the instructor or department for information.

FSoS 8001 Conceptual Frameworks in the Family
3 credit(s);
Instructor: Danes, Sharon M
Description: This course focuses on major theoretical and conceptual models used to study families. Through readings, theory applications to real life situations, journal article evaluations and small group interactions, unique concepts, propositions, assumptions, and limitations of family theories will be studied. Assignments will challenge you to critically interpret the theoretical applications within assigned and student-selected family research areas.
Style: 40% Lecture, 20% Discussion, 10% Small Group Activities, 25% Student Presentation, 5% Guest Speakers.
Grading: 25% reports/papers, 10% special projects, 25% reflection paper, 20% in-class presentation, 20% class participation.

FSoS 8013 Qualitative Family Research Methods
3 credit(s);
Instructor: Wieling, Elizabeth
Description: Student may contact the instructor or department for information.

FSoS 8014 Quantitative Family Research Methods II
3 credit(s);
Instructor: Rueter, Martha A
Description: This course is designed to prepare you to become an independent quantitative family researcher. It is assumed that students taking this course have a solid foundational knowledge of quantitative research methods. In this course, we will build on your knowledge of quantitative methods to help you develop the additional skills and knowledge necessary to design, fund, and properly manage your own family research projects. One of the vehicles for learning is the preparation of a National Institutes of Health R01 grant application. This application covers each component of a well designed research study. Properly completing the application provides an excellent opportunity to directly apply the full range of skills needed to become a family researcher.
Style: 30% Lecture, 25% Discussion, 20% Small Group Activities, 10% Student Presentation, 5% Guest Speakers, 10% Web Based.
Grading: 80% reports/papers, 20% in-class presentation.

FSoS 8035 Assessment of Couples and Families
A-F only, 3 credit(s);
Instructor: Craft, Shonda Marie
Description: The focus of this course is the exploration of issues in the clinical assessment of specific clinical constructs and relational difficulties experienced in the context of couple and family systems. Students will learn about the underlying assumptions and values of contemporary assessment approaches, as well as empirically and clinically tested assessment procedures. Specific assessment techniques will be discussed and evaluated. Ethical, legal, clinical, and practical issues will be explored. Attention will be paid to theoretical underpinnings of measures as well as their psychometric properties. A major area of emphasis in each class will be to integrate issues related to cultural diversity (e.g., gender, race, ethnicity, class, sexual/romantic orientation, ability/disability, etc.) throughout the course. Lectures, class activities, group discussions, and individual assignments will be used to promote and enhance critical thinking skills related to course material.
Style: 30% Lecture, 30% Discussion, 30% Small Group Activities, 10% Student Presentation.
Grading: 40% reports/papers, 30% special projects, 20% in-class presentation, 10% class participation.

FSoS 8036 Couple and Family Therapy Research
A-F only, 3 credit(s);
Instructor: Harris, Steven Michael
Description: For advanced doctoral students in Couple and Family Therapy and other doctoral students interested in clinical research with couples and families. Emphasis on the clinical research needs for the field of Marriage and Family Therapy. Focus on cutting-edge clinical research via in class guest lectures from MFT researchers across the nation. Preparation for future academics and clinical administrators to think about their own personal research agenda and the relationship between this agenda and the larger system. Strengths and limitations of current couple and family therapy outcome and process research; methodological approaches, including qualitative and quantitative, attention given to the ethical dilemmas that can present when doing clinical research.
Style: 25% Lecture, 30% Discussion, 10% Small Group Activities, 10% Student Presentation, 25% Guest Speakers.
Grading: 40% reports/papers, 20% special projects, 20% attendance, 10% in-class presentation, 10% class participation.

FSoS 8150 Topics in Family Social Science: Global Perspectives on Refugee & Immigrant Families
1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Solheim, Catherine Ann
Description:
FSoS 8193 Directed Study in Family Social Science  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: STAFF  
Description: Directed study for a doctoral student in FSoS or related field.

FSoS 8200 Orientation for Family Social Science  
S-N only, 1 credit(s);  
Instructor: McCulloch,B. Jan  
Description: Orientation of new students in the graduate program in Family Social Science. In a setting of open discussion and questioning, students will obtain an introduction to the department, the field of family science, the academic setting, and roles they will play as Family Social Science Graduate Students and as family science professionals. They also participate in individual “faculty chats” with FSoS faculty and the Wednesday noon FSoS colloquium series.  
Style: 40% Lecture, 30% Discussion, 30% Guest Speakers. Students also participate in "Faculty Chats" and the Wednesday noon FSoS colloquium series  
Grading: This is a S/N course  
Exam Format: There are no exams for this course.

FSoS 8295 Family Therapy Practicum  
S-N only, 1-12 credit(s), max credits 12, 1 completion allowed;  
Instructor: Craft,Shonda Marie  
Description: This course is designed to provide you with group supervision in addition to the supervision you receive at your clinical placement site. Bi-monthly supervision will consist of regular check-ins and case presentations as well as clinical discussions guided by a range of conceptual and theoretical frameworks, clinical models, and areas of learning specific to your developmental needs as a clinician.  
Style: 100% Discussion.  
Grading: 100% other evaluation.

FSoS 8296 Family Therapy Internship  
S-N only, 1-21 credit(s), max credits 21, 1 completion allowed;  
Instructor: Harris,Steven Michael  
Description: This course is designed to provide you with supervision during your internship experience. Frequency, orientation, and supervision structure will be determined in conjunction with your supervisor.

FSoS 8297 Supervision of Supervision  
S-N only, 1-3 credit(s), max credits 12, 12 completions allowed;  
Instructor: Harris,Steven Michael  
Description: This course is only open to Doctoral Students in the Couple and Family Therapy program in the Dept. of Family Social Science. Emphasis on the supervisory experiences of students who are currently supervising therapists in training. Students enrolled in this course must keep track of their hours accrued as expected and outlined in the AAMFT Approved Supervisor handbook.  
Style: 50% Small Group Activities, 50% Student Presentation.  
Grading: 50% attendance, 50% class participation. Attendance includes both the class meeting times as well as attendance at supervision sites in the community.

FSoS 8550 Advanced Topics in Family Social Science: Prevention: implementation &dissemination research  
A-F only, 3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Gewirtz,Abigail  
Description:

FSoS 8755 Master's Paper: Plan B Project  
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;  
Instructor: STAFF  
Description: Graduate faculty work with students on research for Plan B paper.

FSoS 8794 Directed Research in Family Social Science  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: STAFF  
Description:
Finance  3-122 Carlson School of Management

Fina 1905 Freshman Seminar: Boom, Busts, and Market Efficiency
A-F only, 2 credit(s), max credits 6;
Instructor: Alexander, Gordon J.
Description: Student may contact the instructor or department for information.

Fina 3001 Finance Fundamentals
A-F only, 3 credit(s); ACCT 2050, OMS 2550
Credit will not be granted if credit has been received for: APEC 3501;
Instructor: STAFF

Fina 3001 Finance Fundamentals
A-F only, 3 credit(s); ACCT 2050, OMS 2550
Credit will not be granted if credit has been received for: APEC 3501;
Instructor: Reik, John Willard
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This class is a good choice if you want to learn how to: (1) analyze a business's financial statements; (2) compute what something deposited today at a given interest rate will be worth in the future; (3) compute the maximum amount that you should pay for something; (4) forecast a firm's balance sheet; (5) decide whether to acquire a long-term business asset; or (6) compute the cost of a firm's capital (money). Although you will learn a little about the stock and bond market, the emphasis of this course is on managing a firm's finances.
Style: Online with handwritten exams
Grading: 30% mid exam, 40% final exam, 30% quizzes.
Exam Format: Supervised, in-person (not online) exams

Fina 4121 Financial Markets and Interest Rates
A-F only, 2 credit(s);
Instructor: STAFF
Description: Course Provides and introduction to the principles of and methods used in Financial Markets. Basic framework for valuing fixed income securities. Term structure on interest rates, forward rates, principles of fixed-income valuation. Surveys treasury, corporate, municipal, securitization markets.
Style: 90% Lecture, 10% Discussion.
Grading: 45% final exam, 5% special projects, 20% quizzes, 30% written homework. These percentages are subject to change and provided to give the student a rough idea of the weighting of course elements.

Fina 4221 Principles of Corporate Finance
A-F only, 2 credit(s);
Instructor: Legg, Thomas D
Description: Student may contact the instructor or department for information.

Fina 4221 Principles of Corporate Finance
A-F only, 2 credit(s);
Instructor: Gupta, Shamlall
Description: Student may contact the instructor or department for information.

Fina 4221 Principles of Corporate Finance
A-F only, 2 credit(s);
Instructor: Moser, Helen
Description: Student may contact the instructor or department for information.

Fina 4242W Corporate Investment Decisions
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Focuses on efficiently managing working capital and fixed assets. Cases illustrate some of the topics: working capital management, making capital budgeting decisions, targeting/evaluating firm performance, assessing mergers/acquisitions.
Fina 4321 Portfolio Management and Performance Evaluation  
A-F only, 2 credit(s);  
Instructor: STAFF  
Description: Introduces investment environment and concepts used to manage security portfolios. Portfolio/security risk/return tradeoffs, portfolio diversification, asset allocation, active portfolio management versus indexed portfolios, portfolio performance evaluation.

Fina 4329 Security Analysis Capstone  
A-F only, 2 credit(s);  
Instructor: Wright, Mike  
Description: Student may contact the instructor or department for information.

Fina 4422 Financial Modeling  
A-F only, 2 credit(s);  
Instructor: Legg, Thomas D  
Description: Student may contact the instructor or department for information.

Fina 4522 Options in Corporate Finance  
A-F only, 2 credit(s);  
Instructor: Yu, Jianfeng  
Description: Student may contact the instructor or department for information.

Fina 4621 The Global Economy (Macro)  
A-F only, 2 credit(s);  
Instructor: Bazdresch, Santiago  
Description: This course is a survey of macroeconomics from a global perspective. Macroeconomic policies in emerging markets and developed countries are covered. International dimensions of corporate finance are discussed. Exchange rate determination mechanisms, exchange rate regimes, the interest rate parity conditions, and a country's international capital and commercial balances are analyzed. Students who have completed ECON 3102 Intermediate Macroeconomics Theory should not enroll in FINA 4621.  
Style: 40% Lecture, 25% Discussion, 25% Small Group Activities, 10% Student Presentation.

Fina 4622 International Finance  
A-F only, 2 credit(s);  
Instructor: Le, Thanh Trung  
Description: Student may contact the instructor or department for information.

Fina 6121 Debt Markets, Interest Rates, and Hedging  
A-F only, 2 credit(s);  
Instructor: STAFF  

Fina 6241 Corporate Finance Analysis and Decisions  
A-F only, 4 credit(s);  
Instructor: STAFF  
Description: Theoretical/applied understanding of corporate financial decisions. Adjusted present value, economic value added options. Impact of financing decisions on real asset valuation, managerial incentives, corporate strategy.

Fina 6242 Advanced Corporate Finance Analysis and Decisions  
A-F only, 4 credit(s);  
Instructor: STAFF  
Description: Theory/practice of efficiently managing working capital, fixed assets. Emphasizes mergers/acquisitions, corporate restructuring, real options. Use of derivatives as financing tools, in deal structure.

Fina 6321 Portfolio Analysis and Management
A-F only, 2 credit(s);
Instructor: STAFF

Fina 6323 Advanced Financial Modeling
A-F only, 2 credit(s);
Instructor: STAFF

Fina 6341 World Economy
A-F only, 4 credit(s);
Instructor: Bond, Philip
Description: This course covers some of the leading policy questions in contemporary economics, with a view to enhancing business understanding of the economic climate: -Does losing $1 trillion matter? -When is a government's budget deficit indefinitely sustainable?
-When are government interventions in financial panics a good idea? -Do high savings rates enhance long run growth prospects? -What does enhance long-run growth prospects? -Government macro policy, part I: spending $1 costs $1, aka, crowding out. -Government macro policy, part II: spending $1 costs nothing, aka, the multiplier. -Are current account deficits good or bad? -The impossible trinity (of monetary policy). -Why unemployment and employment can both fall at the same time -The one percent.

Fina 6801 Finance Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: STAFF
Description: Independent Study

Fina 8802 Theory of Capital Markets I: Discrete Time
2 credit(s);
Instructor: STAFF
Description: Modern asset pricing theory. Static/discrete time frameworks. Fundamental asset pricing equation. Classical finance models: CAPM, consumption-based CAPM, APT. Complete markets, representative agent, Pareto optimality. Challenges to theories. Approaches such as habit formation, heterogeneous agents (incomplete markets) model.

Fina 8810 Topics in Asset Pricing
A-F only, 2 credit(s), max credits 4;
Instructor: Belo, Frederico
Description: Student may contact the instructor or department for information.

Fina 8812 Corporate Finance I
2 credit(s);
Instructor: Bond, Philip
Description: Student may contact the instructor or department for information.

Fina 8890 Seminar: Finance Topics
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Frank, Murray Z
Description: Student may contact the instructor or department for information.

Fina 8892 Independent Study in Finance
1-8 credit(s), max credits 16, 16 completions allowed;
Instructor: STAFF
Description: Problems or developments of special interest to the student.

Fina 8894 Directed Research in Finance
1-8 credit(s), max credits 16, 16 completions allowed;
Instructor: STAFF
Description: Individualized directed research on a project of interest to the student, approved and advised by faculty.

**Financial Mathematics  127 Vincent Hall**

**FM 5001 Preparation for Financial Mathematics I**
- 3 credit(s);
- Instructor: Gray, Lawrence F
- Description: Student may contact the instructor or department for information.

**FM 5011 Mathematical Background for Finance I**
- 4 credit(s);
- Instructor: Kemajou, Isabelle
- Description: Student may contact the instructor or department for information.

**FM 5021 Mathematical Theory Applied to Finance I**
- 4 credit(s);
- Instructor: Tolmasky, Carlos
- Description: Student may contact the instructor or department for information.

**FM 5031 A Practitioner's Course in Finance I**
- 4 credit(s);
- Instructor: Morton, Blaise Grayson
- Description: Student may contact the instructor or department for information.

**FM 5091 Computation, Algorithms, and Coding in Finance I**
- 3 credit(s);
- Instructor: Prouty, Christopher William
- Description: Student may contact the instructor or department for information.

**Finnish  320 Folwell Hall**

**Fin 1001 Beginning Finnish**
- 5 credit(s);
- Credit will not be granted if credit has been received for: FIN 4001;
- Instructor: Karvonen, Daniel
- Description: Come study the language of sauna, Sibelius, and Nokia! Finnish is unrelated to most languages in Europe and may seem a bit exotic at first. There are no words for "the"or "a," and there's only a single pronoun for both "he" and "she." But you can learn to spell Finnish in just a few minutes, since words in Finnish are written pretty much like they are pronounced. Much of class time will focus on interactive communicative activities, with students working in pairs or in groups. You'll also learn about Finnish culture via video clips of real-life situations in Finland and other authentic cultural materials such as songs and movies. The main textbook for the course is "Supisuomea" (chapters 1-5), which is accompanied by CDs and a video, which will be used in class. You'll also learn both the written and spoken varieties of Finnish, which are quite different from one another. Qualified students may register for this course under the 4001 designator for 2 credits (and reduced tuition).
- Style: 25% Lecture, 5% Film/Video, 70% Small Group Activities. interactive exercises
- Grading: 10% final exam, 21% reports/papers, 30% quizzes, 6% in-class presentation, 21% class participation, 12% other evaluation.
- oral interviews
- Exam Format: essay, short answer, matching

**Fin 1003 Intermediate Finnish**
- 5 credit(s);
- Credit will not be granted if credit has been received for: FIN 4003;
- Instructor: Karvonen, Daniel
- Description: This is an intermediate course that requires that you've taken a year of college-level Finnish or have equivalent knowledge of the language. The main textbook for the course is "Suomea paremmin", which focuses on spoken Finnish and is accompanied by a CD. Authentic materials reflecting Finnish culture (e.g., songs, movies, TV news broadcasts, newspaper articles, etc.) will also be used. Much of class time will focus on interactive communicative activities designed to activate the material learned in class, with students working in groups or pairs. Qualified students may register for this course under the 4003 designator for 2 credits (and reduced tuition).
- Style: 20% Lecture, 80% Small Group Activities. interactive exercises
- Grading: 10% final exam, 18% reports/papers, 28% quizzes, 5% in-class presentation, 29% class participation, 10% other evaluation.
oral interviews

Exam Format: short answer, essay

Fin 3011 Advanced Finnish
3 credit(s); 1004 or 4004
Credit will not be granted if credit has been received for: FIN 4011;
Instructor: Karvonen, Daniel
Description: This course is designed to refine advanced students' skills in oral and written expression in Finnish. Advanced grammatical constructions characteristic of written Finnish will be explored via newspaper articles and short stories, with time spent analyzing the constructions together in class. Each student will also get the chance to provide an oral news summary of some current event in Finland every other week. The majority of class time will center around class discussion, giving students plenty of speaking practice. There will be three essays, three take-home exams, and a final class presentation on some aspect relating to Finnish culture.
Style: 10% Lecture, 90% Discussion.
Grading: 24% reports/papers, 30% quizzes, 6% in-class presentation, 28% class participation, 12% other evaluation. oral news summaries
Exam Format: short answer, essay

Fin 4001 Beginning Finnish
2 credit(s); 1004 in another language or passing score on LPE or grad student
Credit will not be granted if credit has been received for: FIN 1001;
Instructor: Karvonen, Daniel
Description: Come study the language of sauna, Sibelius, and Nokia! Finnish is unrelated to most languages in Europe and may seem a bit exotic at first. There are no words for "the" or "a," and there's only a single pronoun for both "he" and "she." But you can learn to spell Finnish in just a few minutes, since words in Finnish are written pretty much like they are pronounced. Much of class time will focus on interactive communicative activities, with students working in pairs or in groups. You'll also learn about Finnish culture via video clips of real-life situations in Finland and other authentic cultural materials such as songs and movies. The main textbook for the course is "Supisuomea" (chapters 1-5), which is accompanied by CDs and a video, which will be used in class. You'll also learn both the written and spoken varieties of Finnish, which are quite different from one another. Qualified students may register for this course under the 4001 designator for 2 credits (and reduced tuition).
Style: 25% Lecture, 5% Film/Video, 70% Small Group Activities. interactive exercises
Grading: 10% final exam, 21% reports/papers, 30% quizzes, 6% in-class presentation, 21% class participation, 12% other evaluation. oral interviews
Exam Format: essay, short answer, matching

Fin 4003 Intermediate Finnish
2 credit(s); 1004 in another language or passing score on LPE or grad student
Credit will not be granted if credit has been received for: FIN 1003;
Instructor: Karvonen, Daniel
Description: This is an intermediate course that requires that you've taken a year of college-level Finnish or have equivalent knowledge of the language. The main textbook for the course is "Suomea paremmin", which focuses on spoken Finnish and is accompanied by a CD. Authentic materials reflecting Finnish culture (e.g., songs, movies, TV news broadcasts, newspaper articles, etc.) will also be used. Much of class time will focus on interactive communicative activities designed to activate the material learned in class, with students working in groups or pairs. Qualified students may register for this course under the 4003 designator for 2 credits (and reduced tuition).
Style: 20% Lecture, 80% Small Group Activities. interactive exercises
Grading: 10% final exam, 18% reports/papers, 28% quizzes, 5% in-class presentation, 29% class participation, 10% other evaluation. oral interviews
Exam Format: short answer, essay

Fin 4011 Advanced Finnish
2 credit(s); Grad student
Credit will not be granted if credit has been received for: FIN 3011;
Instructor: Karvonen, Daniel
Description: Student may contact the instructor or department for information.

Fisheries and Wildlife 200 Hodson Hall

FW 1001 Orientation in Fisheries, Wildlife, and Conservation Biology
A-F only, 1 credit(s);
Instructor: Cuthbert, Francesca J
Description: This course is designed for entry level students (e.g. freshmen; transfers) who seek to major in Fisheries and Wildlife.
Other students are welcome in the class as well. Opportunities are presented for students to gain knowledge and skills about the major and future employment. Course content includes: overnight weekend field trip to Cloquet Forestry Center; guest speakers representing careers in academic, state, federal and non-profit institutions and agencies. Assignments include preparation of a resume and 8 one-page writing assignments.

FW 2001 Introduction to Fisheries, Wildlife, and Conservation Biology
3 credit(s);
Instructor: Perry, Jim A
Description: Humans rely on fish and wildlife resources to support a wide range of values. As we make decisions about management of landscapes, we are making decisions about conservation, about the future of our fish and wildlife. This class helps students become more informed citizens by learning about fish, wildlife and other forms of biodiversity, including single species, populations, ecosystem, and landscape approaches. The class is experiential and highly interactive, using decision-case studies to explore current issues.
Style: 30% Lecture, 50% Discussion, 20% Student Presentation.
Grading: 25% mid exam, 25% final exam, 25% additional semester exams, 15% in-class presentation, 10% class participation.

FW 4001 Biometry
A-F only, 4 credit(s);
Instructor: Cohen, Yosef
Description: Student may contact the instructor or department for information.
Style: 30% Lecture, 30% Discussion, 40% Laboratory.
Grading: 15% mid exam, 20% final exam, 20% reports/papers, 10% special projects, 10% quizzes, 10% class participation, 15% problem solving.
Exam Format: Essay

FW 4136 Ichthyology
4 credit(s);
Instructor: Simons, Andrew M.
Description: This course covers the biology and diversity of fishes. Topics covered include evolution, classification, anatomy, locomotion, and behavior. Fishes are a large and diverse group of organisms; therefore these topics will be covered at a general level, focussing in large part on the constraints imposed by the aquatic environment. The laboratory will cover anatomy and diversity of fishes, focussing on the Minnesota fauna. Students will learn the use of dichotomous keys to identify Minnesota fishes and will be expected to learn common and game species by sight. There will be two afternoon field trips during the semester. Assessment is based on 3 lecture exams, 2 lab exams, 1 paper, and participation in lab. Lecture notes and other supplementary material will be available on the web. Students in this class are usually upper level undergraduates or graduate students.

FW 4291 Independent Study: Fisheries
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: STAFF
Description: Individual field, library, and laboratory research in fisheries. Primarily for majors. Students work on special projects. Individual field, library, and lab research in fisheries biology.
Style: special projects and individual directed study
Grading: 100% reports/papers. 100% written reports/papers; may have occasional exceptions

FW 4391 Independent Study: Wildlife
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: STAFF
Description: Individual field, library, and laboratory research in wildlife. Primarily for majors. Students work on special projects. Individual field, library and lab research in fisheries biology.
Style: special projects and individual directed study; visitation to field sites if appropriate
Grading: 100% reports/papers.

FW 5003 Human Dimensions of Biological Conservation
3 credit(s);
Instructor: Fulton, David C
Description: The human dimensions of biological conservation concerns the application of theory and methods from the social, economic and policy sciences to address the challenges and issues of managing and conserving biological resources including fish, wildlife, and their habitats. Natural resource management agencies have traditionally managed wildlife and other natural resources using the best available scientific knowledge about habitat, population dynamics, life histories of species, and other biophysical
information. However, many of the issues and problems related to biological conservation have their origins in human behavior and decision-making. Understanding and developing approaches for addressing these issues requires knowledge of how humans think and act toward fish, wildlife, and ecosystems and how the management of these resources affects humans. Such "human dimensions" knowledge is essential to effectively conserving biological resources in a way desired by the public. Course material will emphasize the application of theories and approaches developed within anthropology, sociology, social psychology, economics and political science. The class is for graduate and upper-division undergraduate students in natural resources.

**Style:** 35% Lecture, 65% Discussion.

**Grading:** 40% mid exam, 20% final exam, 20% reports/papers, 20% class participation.

**Exam Format:** essay

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**FW 5003 Human Dimensions of Biological Conservation**

3 credit(s);

**Instructor:** Cornicelli, Lou

**Description:** The human dimensions of biological conservation concerns the application of theory and methods from the social, economic and policy sciences to address the challenges and issues of managing and conserving biological resources including fish, wildlife, and their habitats. Natural resource management agencies have traditionally managed wildlife and other natural resources using the best available scientific knowledge about habitat, population dynamics, life histories of species, and other biophysical information. However, many of the issues and problems related to biological conservation have their origins in human behavior and decision-making. Understanding and developing approaches for addressing these issues requires knowledge of how humans think and act toward fish, wildlife, and ecosystems and how the management of these resources affects humans. Such "human dimensions" knowledge is essential to effectively conserving biological resources in a way desired by the public. Course material will emphasize the application of theories and approaches developed within anthropology, sociology, social psychology, economics and political science. The class is for graduate and upper-division undergraduate students in natural resources.

**Style:** 35% Lecture, 65% Discussion.

**Grading:** 40% mid exam, 20% final exam, 20% reports/papers, 20% class participation.

**Exam Format:** essay

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**FW 5603W Habitats and Regulation of Wildlife**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Forester, James Derwin

**Description:** This course will give students hands-on experience with the quantitative analysis of wildlife-habitat relationships. The course material will include a large quantitative component; however, only a basic understanding of statistical and ecological principles is required, as is a general familiarity with the natural history and ecology of terrestrial vertebrates. Students will complete two major lab projects during the semester. For the first lab, groups of 3-4 students will design and conduct a wildlife habitat survey. For the second lab, groups will work with animal relocation data in a GIS environment to develop statistical descriptions of wildlife-habitat relationships. In addition to the lab projects, students will work in small groups throughout the semester to develop a research proposal suitable for submission to a graduate fellowship competition. Students taking this course will: (1) read and interpret primary scientific literature; (2) collect field data from which they will create GIS layers of wildlife habitat; (3) quantify spatial patterns of habitat components; (4) quantify patterns of animal habitat use; and (5) communicate their findings in both written and presentation formats. By the end of the course students will understand how to develop and interpret basic statistical models that provide insight into wildlife-habitat relationships, while also understanding the limitations of those models.

**Style:** 40% Lecture, 55% Laboratory, 5% Student Presentation.

**Grading:** 35% reports/papers, 45% special projects, 15% quizzes, 5% written homework.

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**FW 8200 Seminar**

S-N only, 1-4 credit(s), max credits 8, 4 completions allowed;

**Instructor:** Forester, James Derwin

**Description:** Student may contact the instructor or department for information.

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**FW 8394 Research in Fisheries**

1-4 credit(s), max credits 4, 1 completion allowed;

**Instructor:** Newman, Raymond M

**Description:** Student may contact the instructor or department for information.

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**FW 8394 Research in Fisheries**

1-4 credit(s), max credits 4, 1 completion allowed;

**Instructor:** Pereira PhD, Donald L.

**Description:** Student may contact the instructor or department for information.
FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Perry, Jim A
Description: Directed, highly independent research. My current work for UNESCO focuses on natural World Heritage Sites and climate change. I ask what risk the Outstanding Universal Values (OUVs) of these Sites face from future climate conditions, and what adaptation choices society and/or Site managers have. I also lead a global training program for UNEP in Ecosystem Management. In that work, we train watershed managers to take an ecosystem approach, focusing on identifying and sustaining ecosystem services from watersheds. Directed study opportunities are rare, and are originated by the student.

FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Cohen, Yosef
Description: Student may contact the instructor or department for information.

FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Sorensen, Peter William
Description: Student may contact the instructor or department for information.

FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Vondracek, Bruce
Description: Student may contact the instructor or department for information.

FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Simons, Andrew M.
Description: Student may contact the instructor or department for information.

FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Fulton, David C
Description: Student may contact the instructor or department for information.

FW 8394 Research in Fisheries
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Venturelli, Paul A
Description: Student may contact the instructor or department for information.

FW 8452 Conservation Biology
A-F only, 3 credit(s);
Instructor: Polasky, Stephen
Description: Conservation biology is a mission-oriented science that focuses on how to protect and restore biological diversity. In this course, we will review the ecological concepts constituting the scientific basis for biological conservation. However, since most of the threats to biodiversity originate from human actions, understanding human behavior and the social, political and economic systems in which people act is an essential component for those interested in conserving biodiversity. Consequently, we will review ideas and methods from the social sciences relevant for biological conservation. This course is the first-semester of a year-long sequence for conservation biology graduate students. Graduate students from other programs are more than welcome to enroll.

FW 8459 Stream and River Ecology
3 credit(s);
Instructor: Newman, Raymond M
Description: This course is intended to give a broad overview of contemporary stream ecology. The level of coverage and a reliance on primary literature should provide a knowledge base and theoretical background sufficient for the student to keep pace with developments in the future. It is hoped that the students will gain the tools and background to embark on relevant research problems or make better management decisions. Topics include: historical perspective, basic hydrology/fluvial geomorphology, terrestrial-aquatic interactions, detrital dynamics, metabolism, drift, trophic relations, organic matter budgets, spiraling, biotic/abiotic interactions, ecosystem experiments and natural alterations, stability/succession, ecosystem dynamics in a watershed.
Style: 70% Lecture, 10% Discussion, 2% Laboratory, 15% Student Presentation, 3% Field Trips. One all Saturday field trip in late September or early October
Grading: 30% final exam, 15% reports/papers, 5% in-class presentation, 10% class participation, 40% problem solving.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Cuthbert, Francesca J
Description: Student may contact the instructor or department for information.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Arnold, Todd W.
Description: Student may contact the instructor or department for information.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Perry, Jim A
Description: Directed, highly independent research. My current work for UNESCO focuses on natural World Heritage Sites and climate change. I ask what risk the Outstanding Universal Values (OUVs) of these Sites face from future climate conditions, and what adaptation choices society and/or Site managers have. I also lead a global training program for UNEP in Ecosystem Management. In that work, we train watershed managers to take an ecosystem approach, focusing on identifying and sustaining ecosystem services from watersheds. Directed study opportunities are rare, and are originated by the student.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Cohen, Yosef
Description: Student may contact the instructor or department for information.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Gutierrez, Ralph J
Description: Student may contact the instructor or department for information.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Blair, Robert B
Description: Student may contact the instructor or department for information.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Johnson, Douglas H
Description: Student may contact the instructor or department for information.

FW 8494 Research in Wildlife
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Forester, James Derwin
Description: Student may contact the instructor or department for information.

Food Science and Nutrition

FScN 1011 Science of Food and Cooking
4 credit(s); Meets CLE req of Physical Sciences
Instructor: Smith, David Eugene
Description: Student may contact the instructor or department for information.

FScN 1011 Science of Food and Cooking
4 credit(s); Meets CLE req of Physical Sciences
Instructor: Smith, David Eugene
Description: This course examines physical and chemical changes occurring during common food preparation techniques. We will use actual food systems such as souffles, custards, sauces, coffee brewing, and candy making to examine the physics and chemistry of heat transfer, foams, gels, emulsions, extractions, and crystallization. Weekly laboratories will illustrate the impact of physical or chemical changes in a food system on the flavor, texture and appearance of the food. You must come to the lab ready to carefully prepare a specific product that will be shared with others in your lab group. You must take responsibility for working with others in your group to examine all the products, make necessary measurements, and to collaboratively learn the physical science concepts illustrated. As part of a small team, you will design an experiment to test a hypothesis about the behavior of an added/substituted ingredient or a change in a procedure step on the flavor, texture and appearance of a food they prepare. This course is designed for students majoring in non-science-based disciplines that want to explore the physical sciences through foods.

Style: 75% Lecture, 25% Laboratory.

Grading: 40% mid exam, 20% final exam, 30% reports/papers, 10% special projects. Reports are lab group lb reports as is the project.

Exam Format: Multiple choice, fill in the blanks and short answer.

FScN 1013 Dietary Supplements: scientific, regulatory, and cultural aspects
3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Brady, Linda J

Description: The course will cover: 1) Use of dietary supplements in the U.S.; how U.S. public demand drives industry and government. 2) The development and implementation of the law--Dietary Supplements Health and Education Act. 3) DSHEA and "safety testing," and risk assessment: How much safety data is needed before marketing? 4) Ethics of marketing. 5) FTC responsibilities and the ethics of advertising. 6) Other cultures as sources of supplements; transference of use between cultures. 7) Issues and ethics of intellectual property rights of indigenous cultures. 8) Rational use of dietary supplements for health and sports performance; ethical decisions in use for athletic performance. 9) Use of supplements for weight loss. A UM Connect audio video orientation is provided to explain the syllabus and assignment submission and academic integrity; registered students will receive information on orientation about a week before classes start. For each weekly unit, an online UM Connect presentation of the week's power point is also available to complement weekly readings. Students critically evaluate information on supplements and submit weekly homework and critical thinking questions online via the class website; these are graded online and returned. This course functions best for students who can manage their time effectively and are comfortable with a mix of factual questions and "thought" questions (critical thinking) that are more open ended and require students to move beyond the readings into higher level thinking. There is no textbook; readings are online.

Style: 100% Web Based. totally web based

Grading: 50% written homework, 50% reflection paper. homework and critical thinking (reflection) questions

Exam Format: Homework and critical thinking are in multiple parts, with short answers of a paragraph or two for each part

FScN 1102 Food: Safety, Risks, and Technology
OPT No Aud, 3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Diez-Gonzalez, Francisco

Description: Introduction to the inherent risks and safety of the food supply and the use of public policy, and food technology to reduce those risks. The course will survey microbiological, chemical and environmental hazards, government and industry controls used to insure food safety including the new U.S. Food Safety Initiative, and public perception of those risks. The course will emphasize government regulations with respect to adulteration, food safety and misbranding. It will overview the biological, microbiological, physical and chemical deterioration of foods and will describe some of the technologies to control food spoilage. Thermal processing and irradiation as examples of the technologies used in food processing to reduce risk and ensure a safe food supply. This course will focus on current food safety issues and the magnitude of the overall food safety situation. The student will learn about timely issues such as genetically modified foods, food allergies, prion diseases and approaches to biosecurity. This course satisfies the CLE Citizenship and Public Ethics theme and emphasizes public policy making, critical thinking skills and internet use. The course URL is https://vista.umn.edu/webct.

Style: 60% Lecture, 20% Discussion.

Grading: 38% reports/papers, 12% class participation, 50% other evaluation. exams

Exam Format: Short aswers and essays

FScN 1112 Principles of Nutrition
3 credit(s);
Instructor: Brady, Linda J

Description: This course is for all levels of students and will address: 1. essential nutrients needed from the diet; 2. major functions of nutrients and physiological changes with deficiency or excess; 3. digestion, absorption, and metabolism of nutrients; 4. eating programs; 5. scientific method and nutrition; 6. life cycle issues; 7. food safety issues. This class is totally online. Power points and UM Connect presentations (narrated powerpoints) for each chapter are posted on the class site. These contain the key points of the chapters and updated information from current events. Students will be evaluated by weekly online chapter quizzes, a diet analysis and questions about their diet analysis, and a final comprehensive exam covering the major themes of the course. Prerequisite is high school biology, but college biology and chemistry are helpful, since nutrition is a science that is based on biology, physiology, and
biochemistry, as well as more social aspects. Students who learn well alone using text and who need the online flexibility will be best served by this class section. Students who learn best by hearing lectures or interacting with others should consider the other section of the class that meets in person.

**Style:** 100% Web Based.

**Grading:** 25% final exam, 50% quizzes, 25% other evaluation. Diet analysis and associated questions

**Exam Format:** multiple choice

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**FScN 1112 Principles of Nutrition**

**3 credit(s);**

**Instructor:** Arikawa, Andrea Yukie

**Description:** When you are studying nutrition, you soon realize that there is always something new to learn. Scientists are constantly making new discoveries, and there are new advances in the field every day. What was true about nutrition ten years ago is not the case today. Keep in mind that oftentimes there is no single correct answer to a question about nutrition. This uncertainty allows you to decide the best course of action for a particular situation. Hopefully as you complete this course you will become confident in your ability to critically evaluate the plethora of nutrition information and make informed dietary choices for yourself, your family, and those you may be working with professionally.

**Grading:** 43% mid exam, 36% final exam, 14% special projects, 7% quizzes.

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**FScN 1112 Principles of Nutrition**

**3 credit(s);**

**Instructor:** Mashek, Douglas

**Description:** This course is designed to provide students with an introduction to nutrition. We will cover a broad array of topics including: 1) description and classification of the different nutrients; 2) major functions of nutrients and physiological changes resulting from their deficiency or excess; 3) digestion, absorption, and metabolism of nutrients; 4) nutrition-related diseases; 5) nutrition during the life cycle; and 6) food sources of nutrients and food safety issues. Prerequisite is high school biology and chemistry, but additional science courses (college biology, chemistry, biochemistry, etc.) are helpful. In addition to quizzes (online) and exams (in class), students will also complete several assignments involving a dietary assessment that provides an in-depth evaluation of their own diets.

**Style:** 90% Lecture, 5% Discussion, 5% Small Group Activities.

**Grading:** 21% final exam, 5% Discussion, 5% Small Group Activities.

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**FScN 1905 Topics: Freshman Seminar**

**A-F only, 2 credit(s), max credits 3, 1 completion allowed;**

**Instructor:** Csallany, A Saari

**Description:** Student may contact the instructor or department for information.

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**FScN 2021 Introductory Microbiology**

**A-F only, 4 credit(s);**

**Instructor:** O'Sullivan, Daniel J

**Description:** This course is intended primarily for undergraduates who require a basic knowledge of microbiology and how it impacts their everyday life. It will serve as a broad introduction to the diverse world of bacteria, fungi, and viruses; their role as agents of human diseases (from flesh eating bacteria to AIDS) and how humans fight back; their roles in food spoilage, food borne diseases and how to control them; their beneficial roles in food preservation, health promotion (probiotics), preventing plant diseases, food/drug production (biotechnology), cleaning up oil spills (bioremediation). The course will also introduce the student to the basics of genetic engineering and its present and future potential roles in food, agriculture and medicine.

**Style:** 60% Lecture, 40% Laboratory.

**Grading:** 35% mid exam, 30% final exam, 10% quizzes, 25% laboratory evaluation.

**Exam Format:** multiple choice and short answer

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**FScN 2021 Introductory Microbiology**

**A-F only, 4 credit(s);**

**Instructor:** O'Sullivan, Daniel J

**Description:** Student may contact the instructor or department for information.

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**FScN 3102 Introduction to Food Science**

**3 credit(s);**

**Instructor:** Vickers, Zata M

**Description:** Course Description: This course examines why foods change when you heat them, freeze them, mix them together, bake them, etc. Students work in small groups to prepare several different versions of common foods and explain the chemistry responsible for the differences they observe among them. Intended for students majoring in Nutrition or Food Science and others interested in the
science of food preparation. Student learner outcomes: Explain the functions of major food ingredients and preparation steps in a variety of food systems. Describe changes in food resulting from different preparation methods and explain these changes based on knowledge of the physical and chemical changes. By the end of the course students will be able to change recipes to accommodate a variety of dietary restrictions. Laboratory notebooks, quizzes, exams and the final exam provide the assessment for these outcomes. Evaluate the quality of food products using sensory descriptions and objective methods of analysis. Laboratory notebooks provide the assessment for this. Produce and explain the chemical or physical basis for differences in food quality resulting from variations in preparation and/or ingredients. Laboratory notebooks, quizzes and exams provide the assessment for this.

**Style:** 40% Lecture, 10% Discussion, 50% Laboratory.

**Grading:** 40% mid exam, 20% final exam, 12% quizzes, 10% class participation, 10% laboratory evaluation.

**Exam Format:** Writing explanations, definitions, descriptions

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**FScN 3102 Introduction to Food Science**

3 credit(s);

**Instructor:** Vickers, Zata M

**Description:** Student may contact the instructor or department for information.

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**FScN 3301 Food Choices: Healing the Earth, Healing Ourselves**

3 credit(s); Jr or sr or grad student Credit will not be granted if credit has been received for: CSPH 3301;

**Instructor:** Brady, Linda J

**Description:** Food production in our current industrial system feeds the world, but at a cost to the environment. In nutrition we often talk about a healthy diet, but only occasionally do we link our food and diet choices to agricultural practices and the health of the planet. This class will link the concepts of human health and planetary health in terms of food. There are no prerequisites to the class, but you should have been exposed to critical reading, writing, and thinking to make your journey through this class more fulfilling. Using the framework of complexity theory and gentle action, topics that we will cover include: human food/nutrition needs and food security, influences on our food choices and decisions, cultural and personal context of food choices, ways that food is produced-farm to fork, especially industrial monoculture, food choices and the earth's bio diversity, land use, water use and pollution, energy needs, climate change, alternatives-organic and sustainable, fair trade and economic policies and choices, global tradeoffs. Class is totally online, although several videos will be scheduled in the evening for easy student access (students could also view these by purchase or rental). This class works best for students who are self motivated and organized and who are comfortable reading, analyzing, and using data to backup their own opinions.

**Style:** 100% Web Based.

**Grading:** 50% written homework, 50% reflection paper. This class works best for students who can read, evaluate, integrate information, then use it to support their own views about the food system.

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**FScN 3480 Topics in FScN: A Food System Approach to Cooking (HFHL)**

0 credit(s), max credits 4, 1 completion allowed;

**Instructor:** Kurzer PhD, Mindy Susan

**Description:** Student may contact the instructor or department for information.

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**FScN 3612 Life Cycle Nutrition**

3 credit(s);

**Instructor:** Slavin, Joanne Louise

**Description:** Course covers nutritional changes through the life cycle. Emphasis is on pregnancy, lactation, children, teens and the elderly. Students complete a Nutrition Assessment as an assignment. Exams are objective. Course is designed for undergraduates in nutrition but open to all with an interest in nutrition for specific times in the lifespan.

**Style:** 75% Lecture, 25% Discussion.

**Grading:** 80% mid exam, 20% reflection paper. nutrition makeover, nutrition research paper

**Exam Format:** Multiple choice, matching

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**FScN 3614 Nutrition Education and Counseling**

3 credit(s);

**Instructor:** Rosen, Renee A

**Description:** Student may contact the instructor or department for information.

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**FScN 3731 Food Service Operations Management Laboratory**

A-F only, 2 credit(s);

**Instructor:** Marquart, Len

**Description:** Student may contact the instructor or department for information.
FScN 4112 Food Chemistry and Functional Foods
3 credit(s);
Instructor: Peterson, Devin Grant
Description: Student may contact the instructor or department for information.

FScN 4122 Food Fermentations and Biotechnology
2 credit(s);
Instructor: O'Sullivan, Daniel J
Description: This course covers the major food fermentations important for today's food industry, with a particular focus on the microbiological components. These food fermentations cover all the major commodity food groups of dairy, cereal, meat, vegetables and fruits. The different microbial cultures used in foods, including probiotic cultures, will be analyzed focusing on the current and future trend in the culture industry. The student will also be introduced to the impact of biotechnology on food production, from classical to modern day food biotechnology, and beyond. Modern day genetic tools, as applied to plants, animals and microbes, will be examined. A major focus will be on the improvement of microbes used in food production by modern biotechnological approaches.
Style: 80% Lecture, 17% Laboratory, 3% Small Group Activities.
Grading: 40% mid exam, 40% final exam, 15% quizzes, 5% laboratory evaluation.

FScN 4131 Food Quality
3 credit(s);
Instructor: Schoenfuss PhD, Tonya C
Description: Management systems in processing and distribution of foods that ensure food quality, safety and compliance with food laws & regulations. Quality management, HACCP, regulations, audits, plant/equipment design for sanitation, specifications, recalls and control systems.

FScN 4291 Independent Study
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Independent Study is for one-to-one faculty student work agreed upon food science related topics. Prior registration approval is necessary and can be obtained by contacting Sue P. at 624-6753. Contracts are used to outline the proposed projects.

FScN 4312W Food Analysis
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Ismail, Baraem
Description: The course covers major analytical tools needed for any investigation in food Science and technology, whether by the food industry, governmental agencies, or universities. Specifically, the course covers: application of quantitative and qualitative physical, chemical and instrumental methods used for analysis and examination of food constituents, ingredients and products; sensory evaluation techniques; evaluation of methods and interpretation of results. The course covers methods used for: compositional analysis of foods; chemical characterization of foods and food constituents; spectroscopic and chromatographic analysis used for the detection, identification and quantification of food macro- and micro- components; examination of the physical properties of foods; and sensory evaluation of food products. In this course the students will learn to identify the appropriate methods of analysis based on the investigation purpose, which can be nutrition labeling, quality control, product development, or scientific research. This course is intended for upper division undergraduate and graduate students majoring in Food Science.

FScN 4349 Food Science Capstone
A-F only, 2 credit(s);
Instructor: Feirtag, Joellen M
Description: Student may contact the instructor or department for information.

FScN 4612 Advanced Human Nutrition
4 credit(s);
Instructor: Slavin, Joanne Louise
Description: This course covers how we learn about normal human nutrition. We discuss nutrient requirements and how these are determined. Emphasis is on the physiological basis for nutrition. Digestion and absorption of food are emphasized. Sports nutrition and energy balance are also covered extensively. Students will review a nutrition topic and write a research proposal. We also cover dietary recommendations and nutrition policy. The class is designed for undergraduates in nutrition who have completed an introductory nutrition class.
Style: 75% Lecture, 25% Discussion.
Grading: 50% mid exam, 20% final exam, 20% reports/papers, 10% class participation.
Exam Format: multiple choice, true/false.
FScN 4621W Nutrition and Metabolism
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Chen, Xiaoli
Description: This course is designed to provide students with an understanding of carbohydrate, lipid and protein metabolism. Emphases are on main metabolic pathways of three macronutrients and their interrelationship. Main concepts to be introduced include anabolic, catabolic, and amphibolic metabolism and regulation of carbohydrate, lipid and protein. These concepts will assure an understanding of how macronutrient metabolism is regulated to fulfill energy needs for maintaining the body's metabolic and physiological functions. A variety of activities such as small and large group discussions, quizzes, written reports or papers, etc. will be used to prepare students to evaluate scientific discoveries and developments that affect their lives, and formulate opinions about related issues.
Style: 90% Lecture, 10% Discussion.
Grading: 24% mid exam, 20% final exam, 20% reports/papers, 14% quizzes, 16% other evaluation. homework
Exam Format: multiple choice and short answer

FScN 4664 Senior Capstone: Becoming a Registered Dietitian
S-N only, 1 credit(s);
Instructor: Earthman, Carrie P
Description: Student may contact the instructor or department for information.

FScN 4665 Medical Nutrition Therapy I
A-F only, 3 credit(s);
Instructor: Earthman, Carrie P
Description: Nutritional assessment and support; fluid and electrolyte balance; medication/diet interactions. Nutritional intervention in hypermetabolic conditions, disorders of the gastrointestinal system, and in cancer and AIDS. Interventions for pediatric and adult patients/clients.
Style: 55% Lecture, 15% Discussion. Individual and Group Case Work

FScN 5441 Introduction to New Product Development
2 credit(s);
Instructor: Schoenfuss PhD, Tonya C
Description: Student may contact the instructor or department for information.

FScN 8310 General Seminar
S-N only, 1 credit(s), max credits 2;
Instructor: Smith, David Eugene
Description: Student may contact the instructor or department for information.

FScN 8330 Research Topics
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Cannon, Sara Jane
Description: Student may contact the instructor or department for information.

FScN 8335 Carbohydrate Chemistry in Food and Nutrition
2 credit(s);
Instructor: Smith, David Eugene
Description: Student may contact the instructor or department for information.

FScN 8336 Lipid Chemistry and Rancidity of Foods
2 credit(s);
Instructor: Csallany, A Saari
Description: Student may contact the instructor or department for information.

FScN 8391 Independent Study: Food Science
1-4 credit(s), max credits 6, 6 completions allowed;
Instructor: Cannon, Sara Jane
Description: Student may contact the instructor or department for information.
FR 1001 Orientation and Information Systems
A-F only, 1 credit(s);
Instructor: Kilgore, Mike
Description: This course provides orientation and planning for students entering the Forest Resources (FR) and Recreation Resources Management (RRM) majors. During this semester students will be introduced to key issues in their fields of study. Description of careers, career planning (choice of major tracks, internships, summer experience, mentoring), academic advising and engagement with alumni contacts are major components of the course. Introduction to professional skill building includes information technology tools in the workplace and access to library and research tools. At the end of this course students should know the kind of course work needed for their degree choice as well as the timing of when to take courses to successfully complete their undergraduate degree program. Students should know what the student learning centers (SLC) and SMART commons are and how to use them. In addition students should be able to: a) write a cover letter and develop a resume targeting a specific job of interest to them, b) know how to conduct a job search and prepare for a job interview, c) find an internship of interest using resources at the St. Paul Campus Career Center, d) find and apply for study abroad opportunities, e) understand how to use the campus libraries to access information, f) have an appreciation for and obtain some exposure to the importance of geospatial data to their field of study, g) manipulate data in an EXCEL spreadsheet, and h) assess their desire to continue their education beyond the baccalaureate level.

FR 1101 Dendrology: Identifying Forest Trees and Shrubs
3 credit(s);
Instructor: David, Andrew J
Description: Identification, nomenclature, classification, and distribution of common and/or important forest tree and shrub species primarily from North America. This course is approximately 50% classroom and 50% outdoor laboratory on St. Paul campus and stresses field based identification of species, proper nomenclature, community associations, species range, economic importance, natural history, insect/disease problems and wildlife relationships. Students learn about these trees and shrubs through the use of classroom lecture, dichotomous keys and outdoor identification of leaves, fruit, twigs, bark, buds, and form.
Style: 45% Lecture, 5% Discussion, 45% Laboratory, 5% Small Group Activities. Weekly field trips on St. Paul campus, be prepared for all weather Sept through Dec.
Grading: 20% mid exam, 15% final exam, 10% special projects, 30% quizzes, 10% written homework, 15% laboratory evaluation. 2 midterms and final based on lecture materials. Weekly quizzes and laboratory final based on field identification. 2 papers 1-2 pages long. 1 plant collection.
Exam Format: Lecture material (2 midterms and final): true/false, fill-in-the-blank, multiple choice, short answer Laboratory material (weekly): outdoor quizzes; provide Genus, Species, Family, Common name Laboratory material (final): Genus Species Family Com

FR 3104 Forest Ecology
A-F only, 4 credit(s); Biol 1001 or 1009; 1 semester college chemistry recommended Weekend field trip (required) Credit will not be granted if credit has been received for: FR 5104;
Instructor: Montgomery, Rebecca Anne
Description: Ecology, the study of the interactions of organisms and their environment, forms the essential foundation of the management and conservation of the world’s ecosystems. This course examines basic ecological principles through the lens of forest ecosystems, exploring the theory and practice of ecology at various levels of organization from individuals to populations, communities and ecosystems. At each level we examine past and current theoretical advances and use case studies to evaluate the impacts of increasing human domination of global systems on forested ecosystems. The course covers diverse topics including global climate
change; individual and population growth; community assembly; invasive species; biodiversity; and alteration of water, carbon and nutrient cycles. During two class periods per week we explore forest ecology through a combination of lecture, group learning and problem solving, and discussion. Labs include group research projects and trips to local natural areas, urban forests, and the north shore of Lake Superior. Lab sessions are designed to complement and reinforce material covered in regular class periods.

**Style:** 40% Lecture, 30% Laboratory, 25% Small Group Activities, 5% Field Trips. Cooperative group learning activities. Laboratory involves field trips and data collection in forests around the metro area.

**Grading:** 30% mid exam, 20% final exam, 5% reports/papers, 15% special projects, 20% class participation. Class participation includes cooperative group work, quizzes, minute papers, in-class writing, quizzes. The special project is your lab project presentation (oral or poster format).

**Exam Format:** A mixture of definitions, multiple choice, matching, short and long essay

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**FR 3114 Hydrology and Watershed Management**
3 credit(s);[[BIOL 1001 or BIOL 1009], [[CHEM 1015, CHEM 1017] or CHEM 1021], MATH 1151] or instr consent Credit will not be granted if credit has been received for: FR 5114;
Instructor: Perry, Charles Hobart
Description: Student may contact the instructor or department for information.

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**FR 3131 Geographical Information Systems (GIS) for Natural Resources**
A-F only, 4 credit(s); Soph or jr or sr or UHP fr Credit will not be granted if credit has been received for: FR 5131; Meets CLE req of Technology and Society
Instructor: Jenks, Andrew Carl
Description: FR 3131 is an introduction to Geographical Information Systems, focusing on spatial data development and analysis in the science and management of natural resources. Topics covered include basic data structures, data sources, data collection, data quality, geodesy and map projections, spatial and tabular data analyses, digital elevation data and terrain analyses, cartographic modeling, and cartographic layout. Laboratory exercises provide practical experiences that complement the theory covered in lecture.

**Style:** 50% Lecture, 50% Laboratory.

**Grading:** 15% mid exam, 15% final exam, 55% laboratory evaluation, 15% other evaluation. Third Test

**Exam Format:** short answer; multiple choice

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**FR 3204 Landscape Ecology and Management**
A-F only, 3 credit(s); Ecology course Credit will not be granted if credit has been received for: FR 5204;
Instructor: Reich, Peter Bernard
Description: This course is an introduction and survey of landscape ecology. The major theme of the class is the role of spatial configuration on ecological patterns and processes. We examine the landscape ecology in its application to research, analysis, conservation, and management. Topics include: sources of landscape pattern, introduction to landscape quantification, ecological scale, population dynamics, reserve design, and patch dynamics, and disturbance. Special topics are introduced on an annual basis.

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**FR 3204 Landscape Ecology and Management**
A-F only, 3 credit(s); Ecology course Credit will not be granted if credit has been received for: FR 5204;
Instructor: Frelich, Lee E
Description: This course is an introduction and survey of landscape ecology. The major theme of the class is the role of spatial configuration on ecological patterns and processes. We examine the landscape ecology in its application to research, analysis, conservation, and management. Topics include: sources of landscape pattern, introduction to landscape quantification, ecological scale, population dynamics, reserve design, and patch dynamics, and disturbance. Special topics are introduced on an annual basis.

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**FR 3262 Remote Sensing of Natural Resources and Environment**
3 credit(s); Credit will not be granted if credit has been received for: FR 5262;
Instructor: Knight, Joe
Description: Principles and techniques of remote sensing and its applications to mapping and monitoring land/water resources from local to global scales. Forest and natural resource inventory. Forest cover and soil mapping. Land use and global change analysis. Lab provides hands-on experience working with aerial photography and digital imagery using the Imagine image processing software package.

**Style:** 75% Lecture, 25% Laboratory.

**Grading:** 60% mid exam, 30% special projects, 10% quizzes. Grading is based on three mid-term exams, one class project, and several in-class quizzes.

**Exam Format:** The exams are a combination of multiple choice, short answer, and short essay.

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**FR 4293 Directed Study**
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Ek, Alan Ryan  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Enzler, Sherry Anne  
Description: Student may contact the instructor or department for information.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Hoganson, Howard M  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Nelson, Kristen  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Burk, Thomas Edward  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Kilgore, Mike  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Blinn, Charlie  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Current, Dean Alan  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Schneider, Ingrid Eleanore  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study  
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Reich, Peter Bernard  
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Bauer, Marvin E
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Johnson, Gary
Description: The directed studies option is designed for undergraduates that desire to work on a designed study or project on a topic of personal interest and professional development. The study or projects is developed in consultation with faculty member, mentored by the faculty member and is fully defined in a contract between the student and the instructor. The contract must include an initial proposal, a reports of accomplishments and summation and a completion of all outlined tasks in the drawn contract.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Frelitch, Lee E
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Carlson PhD, Stephan Paul
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Bolstad, Paul V
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: David, Andrew J
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: D’Amato, Anthony William
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Sagor, Eli S.
Description: Student may contact the instructor or department for information.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Davenport, Mae Allen
Description: Student may contact the instructor or department for information.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Montgomery, Rebecca Anne
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.
FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Becker,Dennis R
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Zamora,Diomy Santos
Description: Student may contact the instructor or department for information.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Knight,Joe
Description: Study/project on topic of personal interest in consultation with faculty member. Initial proposal, reports of accomplishments.

FR 5104 Forest Ecology
A-F only, 4 credit(s);[Biol 1001 or 1009], grad student or instr consent; 1 semester college chemistry recommended
Weekend field trip (required)Credit will not be granted if credit has been received for: FR 3104;
Instructor: Montgomery,Rebecca Anne
Description: Ecology, the study of the interactions of organisms and their environment, forms the essential foundation of the management and conservation of the world's ecosystems. This course examines basic ecological principles through the lens of forest ecosystems, exploring the theory and practice of ecology at various levels of organization from individuals to populations, communities and ecosystems. At each level we examine past and current theoretical advances and use case studies to evaluate the impacts of increasing human domination of global systems on forested ecosystems. The course covers diverse topics including global climate change; individual and population growth; community assembly; invasive species; biodiversity; and alteration of water, carbon and nutrient cycles. During two class periods per week we explore forest ecology through a combination of lecture, group learning and problem solving, and discussion. Labs include group research projects and trips to local natural areas, urban forests, and the north shore of Lake Superior. Lab sessions are designed to complement and reinforce material covered in regular class periods. At the graduate level, students work in a graduate cooperative learning group during class periods, design an interactive learning activity and participate in an weekly literature discussion group.
Style: 15% Lecture, 20% Discussion, 50% Laboratory, cooperative group learning activities
Grading: 20% mid exam, 15% final exam, 20% reports/papers, 15% special projects, 3% quizzes, 5% in-class presentation, 20% class participation, 3% laboratory evaluation.
Exam Format: Graduate exams will be essay format

FR 5114 Hydrology and Watershed Management
3 credit(s);Grad student or instr consentCredit will not be granted if credit has been received for: FR 3114;
Instructor: Perry,Charles Hobart
Description: Student may contact the instructor or department for information.

FR 5131 Geographical Information Systems (GIS) for Natural Resources
A-F only, 4 credit(s);Grad student or instr consent Credit will not be granted if credit has been received for: FR 3131;
Instructor: Jenks,Andrew Carl
Description: Introduction to GIS. Focuses on natural resources. Data structures, sources, collection, and quality. Lab exercises introduce geodesy, map projections, spatial analyses, and cartographic modeling.

FR 5204 Landscape Ecology and Management
A-F only, 3 credit(s);Grad student or instr consent Credit will not be granted if credit has been received for: FR 3204;
Instructor: Reich,Peter Bernard
Description: This course is an introduction and survey of landscape ecology. The major theme of the class is the role of spatial configuration on ecological patterns and processes. We examine the landscape ecology in its application to research, analysis, conservation, and management. Topics include: sources of landscape pattern, introduction to landscape quantification, ecological scale, population dynamics, reserve design, and patch dynamics, and disturbance.Special topics are introduced on an annual basis.

FR 5204 Landscape Ecology and Management
A-F only, 3 credit(s);Grad student or instr consent Credit will not be granted if credit has been received for: FR 3204;
Instructor: Frelich, Lee E  
Description: This course is an introduction and survey of landscape ecology. The major theme of the class is the role of spatial configuration on ecological patterns and processes. We examine the landscape ecology in its application to research, analysis, conservation, and management. Topics include: sources of landscape pattern, introduction to landscape quantification, ecological scale, population dynamics, reserve design, and patch dynamics, and disturbance. Special topics are introduced on an annual basis.

FR 5262 Remote Sensing of Natural Resources and Environment  
3 credit(s); Grad student or instr consent  
Credit will not be granted if credit has been received for: FR 3262  
Instructor: Knight, Joe  
Description: Principles and techniques of remote sensing and its applications to mapping and monitoring land/water resources from local to global scales. Forest and natural resource inventory. Forest cover and soil mapping. Land use and global change analysis. Lab provides hands-on experience working with aerial photography and digital imagery using the Imagine image processing software package.  
Grading: 50% mid exam, 20% reports/papers, 20% special projects, 10% quizzes.

FR 5264 Advanced Forest Management Planning  
3 credit(s);  
Instructor: Hoganson, Howard M  
Description: Applied models for forest planning to integrate forest resource conditions and uses. Scales range from tactical stand-level management to strategic forest-wide and landscape-level planning and regional timber supply analysis. Understanding optimization models and heuristic techniques as tools for trade-off and sensitivity analyses of alternative management policies and goals. Integrating sustainable timber production with desirable future conditions and spatial structure or biodiversity objectives. Practical problems and case studies involving recent large-scale applications. Offered summer and fall.

FR 8101 Research Problems: Physiological Ecology  
1-5 credit(s), max credits 10, 10 completions allowed;  
Instructor: Reich, Peter Bernard  
Description: Independent research under faculty guidance.

FR 8102 Research Problems: Forest-TREE Genetics  
1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: David, Andrew J  
Description: Student may contact the instructor or department for information.

FR 8103 Research Problems: Forest Hydrology  
1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Eckman, Karlyn  
Description: Student may contact the instructor or department for information.

FR 8104 Research Problems: Forest Ecology  
1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Reich, Peter Bernard  
Description: Student may contact the instructor or department for information.

FR 8104 Research Problems: Forest Ecology  
1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Frelich, Lee E  
Description: Student may contact the instructor or department for information.

FR 8104 Research Problems: Forest Ecology  
1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Montgomery, Rebecca Anne  
Description: Student may contact the instructor or department for information.
FR 8105 Research Problems: Silviculture
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: D'Amato, Anthony William
Description: Student may contact the instructor or department for information.

FR 8106 Research Problems: Urban Forestry--Biology and Management
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Johnson, Gary
Description: The 8106 option is designed for graduate students that are working on a designed research project that is the basis of their graduate thesis. The study or projects is developed in consultation with a faculty member, mentored by the faculty member and is fully defined in the student's proposed graduate statement. The study must include an initial proposal, a reports of accomplishments and summation and a completion of all outlined tasks in the drawn contract.

FR 8107 Seminar: Forest Resources
1 credit(s);
Instructor: Thompson, Jerrilyn LaVarre
Description: Student may contact the instructor or department for information.

FR 8201 Research Problems: Forest Economics
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Hoganson, Howard M
Description: Student may contact the instructor or department for information.

FR 8201 Research Problems: Forest Economics
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Kilgore, Mike
Description: Student may contact the instructor or department for information.

FR 8201 Research Problems: Forest Economics
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

FR 8202 Research Problems: Forest Biometry and Measurements
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Ek, Alan Ryan
Description: Student may contact the instructor or department for information.

FR 8202 Research Problems: Forest Biometry and Measurements
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Burk, Thomas Edward
Description: Student may contact the instructor or department for information.

FR 8203 Research Problems: Forest Recreation
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Schneider, Ingrid Eleanore
Description: Student may contact the instructor or department for information.

FR 8203 Research Problems: Forest Recreation
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Davenport, Mae Allen
Description: Student may contact the instructor or department for information.

FR 8204 Research Problems: Forest Policy
1-5 credit(s), max credits 10, 4 completions allowed;
Instructor: Kilgore, Mike
Description: Student may contact the instructor or department for information.
FR 8204 Research Problems: Forest Policy
1-5 credit(s), max credits 10, 4 completions allowed;
Instructor: Current, Dean Alan
Description: Student may contact the instructor or department for information.

FR 8204 Research Problems: Forest Policy
1-5 credit(s), max credits 10, 4 completions allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

FR 8205 Research Problems: Spatial Data Analysis
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Reich, Peter Bernard
Description: Student may contact the instructor or department for information.

FR 8205 Research Problems: Spatial Data Analysis
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Bauer, Marvin E
Description: Student may contact the instructor or department for information.

FR 8205 Research Problems: Spatial Data Analysis
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Bolstad, Paul V
Description: Student may contact the instructor or department for information.

FR 8205 Research Problems: Spatial Data Analysis
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Knight, Joe
Description: Student may contact the instructor or department for information.

FR 8206 Research Problems: Forest Management
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Ek, Alan Ryan
Description: Student may contact the instructor or department for information.

FR 8206 Research Problems: Forest Management
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Kilgore, Mike
Description: Student may contact the instructor or department for information.

FR 8206 Research Problems: Forest Management
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Blinn, Charlie
Description: Student may contact the instructor or department for information.

FR 8206 Research Problems: Forest Management
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Blanchette, Robert A
Description: Student may contact the instructor or department for information.

FR 8207 Economic Analysis of Natural Resource Projects
A-F only, 2 credit(s);
Instructor: Kilgore, Mike
Description: Student may contact the instructor or department for information.

FR 8208 Research Problems: Environmental Learning and Leadership
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Nelson, Kristen
Description: Student may contact the instructor or department for information.

FR 8208 Research Problems: Environmental Learning and Leadership
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Carlson PhD, Stephan Paul
Description: Student may contact the instructor or department for information.

French 314 Folwell Hall

Fren 1001 Beginning French
5 credit(s);
Instructor: STAFF
Description: This course is intended for students with NO previous study of French, or students who have not studied French in recent years (gap of 3 years or more). If you have more than two years of high school French completed within the last year or two, you should register for Fren 1022 which provides students with an accelerated review of Fren 1001 material followed by material covered in Fren 1002. For further information on placement, see your advisor or contact the Department of French and Italian. Fren 1001 is a theme-based course. Students develop their communication skills in French in different areas: speaking, writing, listening and reading. In addition to linguistic skills, students develop a better understanding of diverse aspects of French-speaking cultures. Themes addressed in the course include: student life, family, recreation, life in Francophone cities, housing, Francophone heritage in Northern America and Canada. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from "Premiere Etape" through Ch. 5. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.
Style: Combination of whole-class and small-group activities
Grading: 10% mid exam, 15% final exam, 12% reports/papers, 8% special projects, 10% quizzes, 25% other evaluation. written exams; 12% oral tests; 8% workbook exercises
Exam Format: All exams evaluate listening, vocabulary, grammar, writing, reading and culture.

Fren 1002 Beginning French
5 credit(s);
Instructor: Estrem, Mary Elaine
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of student group. (Assignments may be submitted via e-mail.) Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course, based on the video series French in Action, you will go to the center of the French-speaking world--Paris--where you will learn French by participating in a story about a young French woman, Mireille Belleau, and a young American man, Robert Taylor, who develop an interest in each other. As their story unfolds, you will learn language for common social situations, such as ordering food and drink; making purchases; talking about one's interests and one's dreams; talking about one's studies; extending, accepting, and refusing invitations; and behaving politely at the dinner table. You will learn to use past tenses, and you will see some of the famous sites in Paris. The language you learn in French 1001 will allow you to function in some social situations and begin your understanding of French grammar.
Style: This is a printed correspondence section.
Grading: 25% mid exam, 50% final exam, 25% written homework. The self-recordings are not graded unless part of a quiz. The oral exercises are for practice and to check your pronunciation. The instructor may record corrections to your pronunciation. Lowest written and oral quiz scores are dropped.
Exam Format: Supervised, in-person exams.

Fren 1001 Beginning French
5 credit(s);
Instructor: STAFF
Description: Fren 1002 is intended for students who have completed Fren 1001 or the equivalent. In this course students build on the interpersonal, interpretive and presentational skills developed in first-semester French and on their knowledge and understanding of Francophone practices and products. Culture is taught through multimedia and cultural readings. Fren 1002 is a theme-based course. Themes addressed in this course include: Francophone youth, food, geography, the environment, travel, education and employment. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from Ch. 6 through Ch. 10. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.
Style: Combination of whole-class and small-group activities
Grading: 25% mid exam, 50% final exam, 25% written homework. The self-recordings are not graded unless part of a quiz. The oral exercises are for practice and to check your pronunciation. The instructor may record corrections to your pronunciation. Lowest written and oral quiz scores are dropped.
Exam Format: Supervised, in-person exams.

Fren 1002 Beginning French
5 credit(s); 1001 or equiv Credit will not be granted if credit has been received for: FREN 4022;
Instructor: STAFF
Description: Fren 1002 is intended for students who have completed Fren 1001 or the equivalent. In this course students build on the interpersonal, interpretive and presentational skills developed in first-semester French and on their knowledge and understanding of Francophone practices and products. Culture is taught through multimedia and cultural readings. Fren 1002 is a theme-based course. Themes addressed in this course include: Francophone youth, food, geography, the environment, travel, education and employment. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from Ch. 6 through Ch. 10. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.
Style: Combination of whole-class and small-group activities
Grading: 25% mid exam, 50% final exam, 25% written homework. The self-recordings are not graded unless part of a quiz. The oral exercises are for practice and to check your pronunciation. The instructor may record corrections to your pronunciation. Lowest written and oral quiz scores are dropped.
Exam Format: Supervised, in-person exams.
Fren 1004 Intermediate French

5 credit(s);
Instructor: STAFF

Description: This course is for those who have successfully passed Fren 1003 with a C- or better or have passed all sections of the EPT (Entrance Proficiency Test) for this level. This course continues the building of speaking, writing, listening and reading skills acquired during the first three semesters of French while expanding cultural awareness, knowledge and understanding of Francophone cultures. Emphasis is placed on reading, writing and culture. The theme of this course is that of cultural identity, addressed via discussion of food, family, education, work, nationality and diversity. A custom edition of "Ouvertures" (based on the 4th ed.) includes contemporary and literary texts. In this text students will learn material from Chapters 1 through 8, with emphasis on chapters 1, 2, 3, 6 and 7. A supplemental course pack includes activities to accompany video clips, as well as supplemental grammar activities. Writing skills will be developed through process-writing essays. Several class sessions will allow students to work with audio-visual resources (mainly film clips) to develop their listening skills; the clips will also serve as a basis for cultural discussions. Email exchanges with native French speakers learning English will further enhance cultural knowledge. During enrollment in 1004 students who choose to, will have the opportunity to complete the Language Proficiency Exam (LPE) and earn a text line on their transcript endorsing their proficiency in French.
**Style:** Mostly discussion and student involvement in pair/group activities.

**Grading:** 15% final exam, 20% reports/papers, 5% quizzes. 10% email exchanges and other assignments; 30% written exams; 15% oral exams; 5% workbook exercises

**Exam Format:** Exams assess a student's listening, reading, speaking and writing proficiency. Oral exams are administered in pairs, written exams involve answering short questions and essay writing.

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**Fren 1022 Accelerated Beginning French**

5 credit(s); 2 or more yrs high school French

**Credit will not be granted if credit has been received for:** FREN 4002;

**Instructor:** STAFF

**Description:** Prereq: 2 or more yrs high school French

This beginning French course for false beginners is intended for students who have previously studied French in high school or at a community college, or who are transfer students, while Fren 1001 is a course for students with no previous French studies. The Fren 1022 course begins with a review of Fren 1001 materials (Ch. preliminaire through Ch. 5 in "Deux Mondes" 6th ed.), followed by materials introduced in Fren 1002 (Ch. 6 through Ch. 10). In other words, the course allows students to learn first-year materials in one semester. Upon entering Fren 1022 students should be familiar with basic vocabulary related to daily life and daily survival situations, present and past tenses (please note: "passe compose" will be reviewed and "imparfait" will be introduced). Fren 1022 is a theme-based course. Themes addressed in this course include: student life, family, recreation, housing, Francophone heritage in North-America, Francophone youth, food, geography, the environment, travel, education and employment. Students develop knowledge and understanding of Francophone practices and products through multimedia and cultural readings. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. Since the majority of class is devoted to communication class attendance is fundamental.

**Style:** Mostly discussion and student involvement in pair/group activities

**Grading:** 36% written exams, 15% oral exams, 13% final exam, 12% reports/papers, 10% special projects, 7% quizzes, 7% workbook exercises

**Exam Format:** All exams evaluate listening, vocabulary, grammar, writing, reading and culture. Oral skills are assessed in pair discussions.

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**Fren 3014 French Phonetics**

2 credit(s);

**Instructor:** Treece PhD,Rick

**Description:** This course will focus on both the theoretical and practical aspects of French pronunciation, with a strong emphasis on improving pronunciation. In the theoretical portion of the course, the major aspects of French pronunciation will be examined, with particular attention given to areas of contrast between French and English pronunciation. Students will learn to use symbols from the International Phonetic Alphabet in order to do phonetic transcription, i.e. representing French sounds with phonetic symbols. Another important theoretical component is learning the rules governing the correspondence between written letters and their pronunciation. In the practical portion of the course, students will be given extensive pronunciation practice so that they may identify and eliminate errors in their own pronunciation. NOTE: This is NOT a course in French conversation. This course is designed for non-native speakers of French and is a required course for French majors who declared the major prior to Fall 2010 (who may, if they have excellent pronunciation skills, attempt to gain exemption from this requirement by passing a practical pronunciation test).

**Style:** 10% Lecture, 10% Discussion, 80% Laboratory.

**Grading:** 10% final exam, 5% reports/papers, 20% quizzes, 10% class participation, 10% laboratory evaluation, 45% other evaluation.

8 audio recordings

**Exam Format:** short answer, multiple choice

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**Fren 3015 Advanced French Grammar and Communication**

3 credit(s);

**Instructor:** STAFF

**Description:** Fren 3015 is the first in a two-course sequence (with 3016) which combines an intensive review of grammar with a special focus on the articulation and organization of ideas through reading, writing, and textual analysis. In 3015, students will develop skills in a variety of writing forms (e.g. portrait, description, narration) while exploring selected cultural themes through written texts and film. Course requirements include exams as well as regular writing assignments, which usually involve one rewriting. In order to enroll in 3015, it is highly recommended that students have completed Fren 1004 with a minimum grade of B; transfer students should take the Language Proficiency Exam and receive a High Pass. For information on the LPE, see &lt;a href="http://langtest.umn.edu/imdatesGPT.html"&gt;http://langtest.umn.edu/imdatesGPT.html&lt;/a&gt;

**Style:** Language instruction

**Exam Format:** Grammar exercises, essays

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**Fren 3015 Advanced French Grammar and Communication**

3 credit(s);
Instructor: Cherbuliez, Juliette
Description: Fren 3101W is the first in a two-course sequence (with 3016) which combines an intensive review of grammar with a special focus on the articulation and organization of ideas through reading, writing, and textual analysis. In 3015, students will develop skills in a variety of writing forms (e.g. portrait, description, narration) while exploring selected cultural themes through written texts and film. Course requirements include exams as well as regular writing assignments, which usually involve at least one rewriting. In order to enroll in 3015, it is highly recommended that students have completed Fren 1004 with a minimum grade of B; transfer students should take the Language Proficiency Exam and receive a High Pass. For information on the LPE, see <a href="http://langtest.umn.edu/imdatesGPT.html">http://langtest.umn.edu/imdatesGPT.html</a>
Style: Language instruction
Exam Format: Grammar exercises, essays

Fren 3016 Advanced French Composition and Communication
3 credit(s);
Instructor: STAFF
Description: Fren 3016 is the second in a two-course sequence (with 3015) which combines an intensive review of grammar with a special focus on the articulation and organization of ideas through reading, writing, and textual analysis. In 3016, students will develop skills in a variety of writing forms (e.g. compte rendu, argumentative essay, film scene analysis) while exploring selected cultural themes through written texts and film. Course requirements include written exams as well as regular writing assignments, which usually involve one rewriting. Students who do not receive a grade of B or better in 3015 (or equivalent course) are strongly encouraged to repeat 3015 before taking 3016.
Style: Language instruction
Grading: 50% written homework, 10% class participation.
Exam Format: Grammar exercises, essay

Fren 3018 French Oral Communication
3 credit(s);
Instructor: Mougel, Patricia M.
Description: This course is designed for students who want to further develop their French speaking and listening skills while learning about sustainable development issues in particular those related to water. Water is part of our daily lives especially in our water-rich state. It is a common theme in the headlines these days whether it pertains to natural disasters, conservation practices or pollution and shortages around the world. This advanced communication course taught in French will explore the theme of water from a multi-disciplinary and international perspective. We will address the following topics: pre-European and European uses of waterways in Minnesota, pollution of rivers, lakes, seas and oceans in the U.S. France and Canada, water footprint and conservation, water uses and shortages around the world, in particular in Francophone Africa, women and water access, water and human rights, water and conflicts. We will discuss water sustainability within the overall framework of sustainable development. You will have opportunities to research other areas of sustainable development: food, energy, transportation, architecture, urban development. We will make extensive use of authentic written (newspapers, magazines) and visual texts (photographs, documentaries, news broadcasts) which will allow us to compare and contrast perspectives from different disciplines and different cultures regarding water sustainability and sustainable development. Interpretation of authentic documents, discussion and debates will be emphasized. You will explore a sustainable development issue as it relates to your field of study for an academic presentation. Other assignments include a short oral presentation on water/sustainable development current events in the French-speaking world, journal writing, debate preparation and enactment. The final exam will evaluate your aural comprehension of news broadcasts and your ability to discuss the issues addressed in the course in an informed manner.
Style: 25% Discussion, 40% Small Group Activities, 35% Student Presentation.
Grading: Oral news presentation: 10% Debate: 12% Vocabulary quizzes: 8% Journals: 20% Academic presentation: 25% Final exam (listening): 15% Final exam (speaking): 10%

Fren 3101W Methods in French and Francophone Studies
4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Brewer, Maria M
Description: FREN 3101W is a writing intensive course offering a broad introduction to the critical methods, standards of scholarship, and body of knowledge specific to the discipline of French and Francophone Studies. The course will train students to understand and analyze various documents and media such as literary works, cultural or theoretical texts, cultural artifacts, film, art, and visual media pertaining to France and Francophone communities from selected periods spanning the centuries. Since this is a writing intensive course, particular attention is given to the content, style and format of written assignments.
Style: 60% Lecture, 40% Discussion.
Grading: 15% mid exam, 60% reports/papers, 5% attendance, 10% in-class presentation, 10% class participation.
Exam Format: essay
Fren 3101W Methods in French and Francophone Studies
4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Boardman, Sarah Renee
Description: FREN 3101W is a writing intensive course offering a broad introduction to the critical methods, standards of scholarship, and body of knowledge specific to the discipline of French and Francophone studies. The course will train students to understand and analyze various documents and media such as literary works, cultural or theoretical texts, cultural artifacts, film, art, audio and visual media pertaining to France and Francophone communities from selected periods spanning the centuries. Since this is a writing intensive course, particular attention is given to the content, style and format of written assignments. In this course section, "Boundaries and Transgressions" we will explore the theme of boundaries in French and Francophone literature and cinema from the 16th to the 21st centuries. We will examine a variety of boundaries (such as those that define the society in the various periods we study, those that indicate which behaviors are acceptable and which are taboo, those that delimit peoples and nations, and those that determine who qualifies as a subject). Among the questions we will address are: How are different boundaries defined and what are their functions? What is at stake in crossing or passing through boundaries? In what ways do the authors we study transgress boundaries or fail to do so?

Fren 3101W Methods in French and Francophone Studies
4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Wall-Romana, Christophe M
Description: Truth, Lies and Secrets In our exploration of methods in French Studies we will discuss concepts, texts, films and audiovisual works that focus on truth telling, lying or keeping a secret. From Lancelot's illicit love of Guinevere, to Zola's 'J'Accuse' and Moliere's Le Bourgeois Gentilhomme, and from the deathly secrecy of resitants in Melville's Army of Shadows to the hushed massacre of Algerian immigrant protesters in 1961 Paris, and the recent film Cache, whether to hide or reveal the truth has been at the center of art, culture, politics and philosophy. Isn't a metaphor or a novel a kind of true untruth? Why would you lie even in Hell? as do Sartre's protagonists in Huis Clos?

Fren 3101W Methods in French and Francophone Studies
4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Abderrezak, Hakim
Description: This course is an introduction to literature and methods of literary analysis for students preparing a major or minor in French. This course treats selected works of French and Francophone literature from the Early Modern to the Modern Period. Students learn to identify the salient features of the major genres, to apply techniques of close textual reading, and to write critical analyses of poetry, fictional prose, and plays. Works are analyzed from various perspectives with a view to understanding their place in literary history and cultural context. Some key topics of the course will be subjectivity, language, narration, description, rhetorical figures, identity, power, and desire. Writing is an important component of this class; class discussions and oral assignments will focus not only on understanding literary works but also on how they function, so that students may apply skills developed through discussion to their written assignments.

Fren 3250 French Poetry: French Poetry and Cinema
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Wall-Romana, Christophe M
Description: This course provides a comparative survey of some of the main currents in French poetry and French avant-garde cinema that constitute two crucial bodies of knowledge for 20th-century French culture at large, and it does so by contrasting modes of inquiry and analysis of text-based vs. audiovisual-based works.
Style: 15% Lecture, 20% Film/Video, 40% Discussion, 15% Small Group Activities, 10% Student Presentation.
Grading: 10% mid exam, 40% reports/papers, 10% special projects, 10% attendance, 10% journal, 10% in-class presentation, 10% class participation.

Fren 3340 Topics in Modern French Literature: The Holocaust in France
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Chauvat, Bruno
Description: "The Holocaust in France" This course examines the event of the Holocaust in France through early testimonies of survivors written in French to contemporary debates surrounding the interpretation of this event and of its representation in literature, art and film. Modern France has a vexed history with regard to the Jews; a history that culminates with the Vichy regime and with what can be seen a civil war between Resistance and Collaboration. How does this history affects the reception of testimonies, the writing of fiction, the making of films and, ultimately, the heated debates about the ways of talking and representing the Holocaust? More than a course on the Holocaust itself, this course deals with the history of its remembrance.

Fren 3350 Topics in Literature: Animals, Humans, Literature
3 credit(s), max credits 9, 3 completions allowed;
Fren 3500 Linguistic Analysis of French
A-F only, 3 credit(s);
Instructor: Kerr, Betsy Jean
Description: Though you have studied the French language, probably for many years, your study has no doubt been motivated primarily by practical objectives, i.e. the desire to write, read, speak and comprehend the language. The discipline known as linguistics approaches language from a different perspective, namely, a scientific perspective. The purpose of linguistics is to better understand how particular languages work, and, ultimately, how these particular communicative systems work together with the human brain to allow us to communicate. The purpose of this course is to initiate you into this different approach to language: its basic principles (and how they differ from those of a practical approach), its specialized terminology (in French), its modes of investigating and analyzing language, its ways of describing the diverse aspects of languages and language use. Since the primary language we will be using to illustrate this approach will be French, you will also become acquainted with some of the knowledge about the French language that linguists have come to agree upon. This knowledge includes basic descriptions of the various components of the language: the sounds as described by phonetics and phonology, the forms of words as described by morphology and lexicology, the forms of sentences as described by syntax, and the formation of meaning as described by semantics. Course materials: Primary course text: P. Leon & P. Bhatt, Structure du francais moderne: Introduction a l'analyse linguistique, 3rd ed., Canadian Scholars Press Incorporated, 2005.
NOTE: YOU MUST PURCHASE THE TEXT AT THE UM BOOKSTORE, AS WE WILL BE USING A SPECIAL EDITION NOT AVAILABLE ELSEWHERE. A selection of the Questions following each unit will be assigned and discussed in class. A Moodle course site will be used for supplying links to additional online materials, and for assigning activities requiring application of concepts and methods of analysis to French data, and occasional short essays. Students will also create entries for their personal dictionaries via the Moodle site. Additional short readings will be taken from various sources. THIS COURSE WILL SERVE AS A PREREQ (as an alternative to Ling 3001) FOR OTHER LINGUISTICS COURSES IN THE DEPARTMENT (Fren 3501, 3521, 3531, 3541).
Style: 30% Lecture, 40% Discussion, 10% Laboratory, 20% Small Group Activities.
Grading: 30% written homework, 20% class participation, 10% other evaluation. 3 Exams = total of 40% Attendance + class participation = 20% 'Other' = Personal dictionary
Exam Format: various question types, including short-answer questions and brief essays

Fren 3611 Deciphering Courty Literatures of Medieval France
A-F only, 3 credit(s); 3015 Credit will not be granted if credit has been received for: FREN 3711;
Instructor: Franklin-Brown, Mary
Description: The courts of the High Middle Ages have left us a body of enigmatic and often fragmentary literature: songs of the troubadours, slippery and self-contradictory; romances that mix Celtic legend and Christian morality; histories full of imaginative embellishment; and treatises that may or may not have been intended ironically. How should we understand this material? Is it ever possible to peel away modern stereotypes and study medieval culture, literature, and myth as they really were? What notions do we share with medieval court audiences, and why? What new avenues of investigation have been opened up by recent methods in literary and historical studies? In this class, we will pose such questions as we study texts from three courts of the twelfth century: the Poitevins (the counts of Poitiers and dukes of Aquitaine), the Capetians (the kings of France), and the Angevins (the counts of Anjou, dukes of Normandy, and kings of England). Course taught in English; meets with French 3711. French 3611 is open only to students who have completed FR 3015 and requires reading/writing assignments in French (students who have not already completed FR 3101 are strongly encouraged to enroll in the course concurrently). French 3611 carries credit towards the major/minor. Students who have not completed FR 3015 or do not wish to complete reading/writing assignments in French must enroll in French 3711.

Fren 3711 Deciphering Courty Literatures in Medieval France
3 credit(s); Credit will not be granted if credit has been received for: FREN 3611; Meets CLE req of Global Perspectives; meets CLE req of Literature
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Instructor: Franklin-Brown, Mary

Description: The courts of the High Middle Ages have left us a body of enigmatic and often fragmentary literature: songs of the troubadours, slippery and self-contradictory; romances that mix Celtic legend and Christian morality; histories full of imaginative embellishment; and treatises that may or may not have been intended ironically. How should we understand this material? Is it ever possible to peel away modern stereotypes and study medieval culture, literature, and myth as they really were? What notions do we share with medieval court audiences, and why? What new avenues of investigation have been opened up by recent methods in literary and historical studies? In this class, we will pose such questions as we study texts from three courts of the twelfth century: the Poitevins (the counts of Poitiers and dukes of Aquitaine), the Capetians (the kings of France), and the Angevins (the counts of Anjou, dukes of Normandy, and kings of England). Course taught in English, with reading/writing assignments in English, and open to all students. No prerequisites. French 3711 does not carry credit towards the French major/minor. French majors/minors may earn credit towards the degree by enrolling in French 3611, which meets with French 3711 but requires reading/writing assignments to be completed in French.

Fren 4001 Beginning French
2 credit(s);
Instructor: STAFF

Description: This course is intended for students with NO previous study of French, or students who have not studied French in recent years (gap of 3 years or more). If you have more than two years of high school French completed within the last year or two, you should register for Fren 4022 which provides students with an accelerated review of Fren 4001 material followed by material covered in Fren 4002. For further information on placement, see your advisor or contact the Department of French and Italian. Fren 4001 is a theme-based course. Students develop their communication skills in French in different areas: speaking, writing, listening and reading. In addition to linguistic skills, students develop a better understanding of diverse aspects of French-speaking cultures. Themes addressed in the course include: student life, family, recreation, life in Francophone cities, housing, Francophone heritage in Northern America and Canada. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from "Premiere Etape" through Ch. 5. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.

Style: Combination of whole-class and small-group activities

Grading: 10% mid exam, 15% final exam, 12% reports/papers, 8% special projects, 10% quizzes, 25% other evaluation. written exams; 12% oral tests; 8% workbook exercises

Exam Format: All exams evaluate listening, vocabulary, grammar, writing, reading and culture.

Fren 4002 Beginning French
2 credit(s);Grad student Credit will not be granted if credit has been received for: FREN 1022;
Instructor: STAFF

Description: Fren 4002 is intended for students who have completed Fren 4001 or the equivalent. In this course students build on the interpersonal, interpretive and presentational skills developed in first-semester French and on their knowledge and understanding of Francophone practices and products. Culture is taught through multimedia and cultural readings. Fren 4002 is a theme-based course. Themes addressed in this course include: Francophone youth, food, geography, the environment, travel, education and employment. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from Ch. 6 through Ch. 10. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.

Style: Mostly discussion and student involvement in pair/group activities

Grading: 30% written exams, 15% oral exams, 13% final exam, 12% reports/papers, 13% special projects, 12% quizzes, 5% workbook exercises

Exam Format: All exams evaluate listening, vocabulary, grammar, writing, reading and culture. Oral skills are assessed in pair discussions.

Fren 4003 Intermediate French
2 credit(s);
Instructor: STAFF

Description: Prereq: 1002 or 1022 or Entrance Proficiency Test Description: This course is designed for students who have completed Fren 1002 or 1022 with a C- or better or who have successfully passed the EPT (Entrance Proficiency Test) for this level. In this course students build on the interpersonal, interpretive and presentational skills developed in beginning French and on their knowledge and understanding of Francophone practices and products. Culture is taught through multimedia and cultural readings. Fren 1003 is a theme-based course. Themes addressed in this course include: French media and cinema, the French resistance, wellness and health, current French family, societal and global issues. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from Ch. 11 through Ch. 14. They will also work with the film 'Le Chemin du
Retour’ available on the course site: the story of a young French journalist and her pursuit of the truth about her grandfather's past. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.

**Style:** Mostly discussion and student involvement in pair/group activities

**Exam Format:** Exams assess a student's listening, reading, speaking and writing proficiency. Oral exams are administered in pairs, written exams involve answering short questions and essay writing.

**Fren 4004 Intermediate French**

2 credit(s);  
Instructor: STAFF  
Description: This course is for those who have successfully passed Fren 1003 with a C- or better or have passed all sections of the EPT (Entrance Proficiency Test) for this level. This course continues the building of speaking, writing, listening and reading skills acquired during the first three semesters of French while expanding cultural awareness, knowledge and understanding of Francophone cultures. Emphasis is placed on reading, writing and culture. The theme of this course is that of cultural identity, addressed via discussion of food, family, education, work, nationality and diversity. A custom edition of "Ouvertures" (based on the 4th ed.) includes contemporary and literary texts. In this text students will learn material from Chapters 1 through 8, with emphasis on chapters 1, 2, 3, 6 and 7. A supplemental course pack includes activities to accompany video clips, as well as supplemental grammar activities. Writing skills will be developed through process-writing essays. Several class sessions will allow students to work with audio-visual resources (mainly film clips) to develop their listening skills; the clips will also serve as a basis for cultural discussions. Email exchanges with native French speakers learning English will further enhance cultural knowledge. During enrollment in 1004 students who choose to, will have the opportunity to complete the Language Proficiency Exam (LPE) and earn a text line on their transcript endorsing their proficiency in French.  

**Style:** Mostly discussion and student involvement in pair/group activities.  
**Grading:** 15% final exam, 20% reports/papers, 5% quizzes. 10% email exchanges and other assignments, 30% written exams, 15% oral exams, 5% workbook exercises  

**Exam Format:** Exams assess a student's listening, reading, speaking and writing proficiency. Oral exams are administered in pairs, written exams involve answering short questions and essay writing.

**Fren 4022 Accelerated Beginning French**

2 credit(s); Grad student  
Credit will not be granted if credit has been received for: FREN 1002;  
Instructor: STAFF  
Description: Prereq: 2 or more yrs high school French This beginning French course for false beginners is intended for students who have previously studied French in high school or at a community college, or who are transfer students, while Fren 4001 is a course for students with no previous French studies. The Fren 4022 course begins with a review of Fren 4001 materials (Ch. preliminaire through Ch. 5 in "Deux Mondes" 6th ed.), followed by materials introduced in Fren 4002 (Ch. 6 through Ch. 10). In other words, the course allows students to learn first-year materials in one semester. Upon entering Fren 4022 students should be familiar with basic vocabulary related to daily life and daily survival situations, present and past tenses (please note: "passe compose" will be reviewed and "imparfait" will be introduced). Fren 4022 is a theme-based course. Themes addressed in this course include: student life, family, recreation, housing, Francophone heritage in North-America, Francophone youth, food, geography, the environment, travel, education and employment. Students develop knowledge and understanding of Francophone practices and products through multimedia and cultural readings. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. Since the majority of class is devoted to communication class attendance is fundamental.  

**Grading:** 36% written exams, 15% oral exams, 13% final exam, 12% reports/papers, 10% special projects, 7% quizzes, 7% workbook exercises  

**Exam Format:** All exams evaluate listening, vocabulary, grammar, writing, reading and culture. Oral skills are assessed in pair discussions.

**Fren 4109W Senior Project in French and Francophone Studies**

A-F only, 1 credit(s); Meets CLE req of Writing Intensive  
Instructor: Noakes, Susan J  
Description: Student may contact the instructor or department for information.

**Fren 4109W Senior Project in French and Francophone Studies**

A-F only, 1 credit(s); Meets CLE req of Writing Intensive  
Instructor: Brewer, Maria M  
Description: Student may contact the instructor or department for information.
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Kerr, Betsy Jean
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Preckshot, J E
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Brewer, Daniel
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Sivert, Eileen B
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Cherbuliez, Juliette
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Chaouat, Bruno
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Wall-Romana, Christophe M
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Franklin-Brown, Mary
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Abderrezak, Hakim
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Noakes, Susan J
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Brewer, Maria M
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Kerr, Betsy Jean
Description: Student may contact the instructor or department for information.
Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Preckshot, J E
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Brewer, Daniel
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Sivert, Eileen B
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Cherbuliez, Juliette
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Chaouat, Bruno
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Wall-Romana, Christophe M
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Franklin-Brown, Mary
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Abderrezak, Hakim
Description: Student may contact the instructor or department for information.

Fren 4970 Directed Readings
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: STAFF
Description: Meets unique requirements decided on by faculty member and student. Individual contracts are drawn up listing contact hours, number of credits, written and other work required.

Fren 5350 Topics in Literature and Culture
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Allen, Joseph R
Description: This course is a review of the issues surrounding translation, including theories of representation, ideological work, as well as actual practice. The course is structured around a series of readings and discussion of both historical and contemporary writing on translation; Lawrence Venuti's Translation Studies Reader is the base text. While most of the readings center on the theory and particulars of literary translation, students will be encouraged to explore other manifestations of translation as a historical, cultural or aesthetic issue. Along with those interested in languages and literature, students in disciplines such as creative writing, performance, and the plastic arts are also welcomed. You should be native or near-native speaker of English, as well as an advanced speaker/reader of at least one other language, either classical or vernacular.
Fren 5995 Directed Teaching
S-N only, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Mougel, Patricia M.
Description: Student may contact the instructor or department for information.

Fren 8120 Topics in Later Medieval French Literature: Marco Polo in theoretical & historical context
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Noakes, Susan J
Description: French 8120 Topics in Later French Medieval Literature Fall 2012 The Marvels of the World: the Global Middle Ages, I.
N.B. Taught in English this year. Note: This course is the first semester of the year-long Winton Seminar. The second semester, to be taught in Spring 2013, will treat different but related material. Students may enroll for both semesters or only one. Participation in the second semester is not contingent on participation in the first. During the Fall, the course will be co-taught by Winton Professor Geraldine Heng (Dept. of English, Univ. of Texas-Austin) along with Professor Noakes. "Marvels of the World" translates into English the French title of Marco Polo's famous account of his travels in the East (originally written in French). The seminar's focus will be the Asias (Central, South, East, etc.) during the period ca. 500-ca. 1500 C.E. Readings will be supplemented by discussions with eight visitors from off campus, specialists in the various parts of Asia during the period in question.
Style: 20% Lecture, 60% Discussion, 15% Student Presentation, 5% Guest Speakers.
Grading: 60% reports/papers, 10% in-class presentation, 30% class participation.

Fren 8120 Narrative, History, and Memory: Topics: Reading the City
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Brewer, Daniel
Description: One never experiences the space of the city unmediated. That space comes to us always already as a symbolic representation; as figure or allegory, as novel, poem, film, photograph, painting. The aim of this course is to examine the causes, nature, and consequences of that mediation. "Paris" will constitute our privileged object city. The historical frame for our examination will be from the early eighteenth century to the present, with particular attention paid to the eighteenth and nineteenth century, the moment marked by the emergence of the rationally, planned city, as well as by esthetic, cultural, and political resistance to it. Working out from de Certeau's opposition between tower and street; the planned, panoptically legible city as opposed to the labyrinthine, mythico-poetic, migrational, and spectral city - we will trace the emergence of the modern city and its relation to a modernist esthetic. We will explore how the "metropolis," as Simmel calls it, comes to be an "imagined environment," analogous to Anderson's "imagined community," both the location and the embodiment of modernity. Through our examination of the built environment, the constructed and imaginary space of Paris, we will consider such topics as rational city planning and its discontents, mass culture and alienation, the technologies of city pleasure, the growth of fetish capitalism and consumerism, the city as memory site, the gendering of urban life, and life in the porous global city. Since the city comes to be thought of as a scripted, readable text, literary writing will provide us with important ways of understanding urban experience during the period concerned. The theoretical-conceptual frame for the course will be multiple, involving readings in spatial and visual theory, literary and cultural history, and philosophies of the city, and subject formation. The course will be conducted in French. Most readings are available in English translation, and participants are welcome to contribute in English.
Style: 40% Lecture, 40% Discussion, 20% Student Presentation.
Grading: 60% reports/papers, 10% in-class presentation, 15% class participation.

Fren 8270 Critical Issues: Prose: Philosophy Reading Literature
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Chaouat, Bruno
Description: This seminar will explore the vexed question of philosophy's engagement with literature in twentieth century France.
While we will need to go back to the Greek Antiquity (Plato, Aristotle) to retrace this engagement, and especially the moment of differentiation between logos and mythos, rational speech and fable, we will mainly focus on the breakdown of the borders between these two regimes of discourse in modernity. The purpose of this course is to introduce students to primary texts through the prism of philosophical discourse. We will engage neither with literary theory per se (Roland Barthes, Maurice Blanchot), nor with Michel Foucault's readings of literary texts. Indeed, in this seminar we will try to take the discipline of philosophy as work of the concept seriously, and to assess how literature challenges a regime of discourse based on rationality and that has long defined itself as immune and above other regimes of discourse. To be sure the second half of the French twentieth century has seen more and more effects of contamination between different regimes of discourse (psychoanalysis, anthropology, literature, philosophy, history). The work of Jacques Derrida in particular has pleaded for a collapse of the borders between mythos and logos. With deconstruction, philosophy went to the school of literature. With a few exceptions, the course will couple a philosophical work with a literary one. Another purpose of the course is to show the mutual alteration of literature and philosophy. What does remain of a work of fiction or poetry once a philosopher approaches it? What does literature do to philosophical discourse? We will finally explore the resistances to this "fictionalization" of philosophy, especially with Emmanuel Levinas's ambivalent relation to literature perceived as a threat to the ethical relation.

Fren 8980 Directed Teaching
1-5 credit(s), max credits 25, 25 completions allowed;
Instructor: Brewer, Daniel
Description: Student may contact the instructor or department for information.

Fren 8992 Directed Readings for Graduate Students
1-5 credit(s), max credits 25, 25 completions allowed;
Instructor: Brewer, Daniel
Description: Student may contact the instructor or department for information.

French and Italian 314 Folwell Hall

Filt 5999 Teaching of French and Italian: Theory and Practice
3 credit(s);
Instructor: Melin, Charlotte Ann
Description: Student may contact the instructor or department for information.

Gay, Lesbian, Bisexual, and Transgender Studies 425 Ford Hall

GLBT 1001 Introduction to GLBT Studies
3 credit(s); Credit will not be granted if credit has been received for: GWSS 1007; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: STAFF
Description: GLBT Studies is a rapidly growing, multidisciplinary enterprise whose goal is the study of lesbian, gay, bisexual, transgender, and queer peoples and their histories and cultures, as well as the study of sexuality and its role in the deployment of cultural and social power. This course offers an introduction to this vibrant field from a range of theoretical and disciplinary perspectives. It explores the role of race, class, religion, region, and nation in the construction of modern gender and sexual identities and in the lived experiences of dissident genders and sexualities. We will examine a range of issues, including histories and strategies of resistance; the role of feminism in GLBTQ Studies; transgender and transsexual theory and politics; queer of color critique; AIDS theory and politics; globalization and sexuality; the meanings of new GLBTQ visibility; and recent conceptualizations of homonormativity.
Style: 20% Lecture, 80% Discussion.
Grading: 50% reports/papers, 50% class participation.

GLBT 1001 Introduction to GLBT Studies
3 credit(s); Credit will not be granted if credit has been received for: GWSS 1007; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Petocz, Jessica Marie
**Description:** GLBT Studies is a rapidly growing, multidisciplinary enterprise whose goal is the study of lesbian, gay, bisexual, transgender, and queer peoples and their histories and cultures, as well as the study of sexuality and its role in the deployment of cultural and social power. This course offers an introduction to this vibrant field from a range of theoretical and disciplinary perspectives. It explores the role of race, class, religion, region, and nation in the construction of modern gender and sexual identities and in the lived experiences of dissident genders and sexualities. We will examine a range of issues, including histories and strategies of resistance; the role of feminism in GLBTQ Studies; transgender and transsexual theory and politics; queer of color critique; AIDS theory and politics; globalization and sexuality; the meanings of new GLBTQ visibility; and recent conceptualizations of homonormativity.

**GLBT 3456W Sexuality and Culture**  
3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Sweet, S. Paige  
**Description:**

**GLBT 3610 Topics in GLBT Studies: Chicana/o Latina/o Sex Studies**  
3 credit(s), max credits 6;  
Instructor: Covarrubias, Alexandra Mendoza  
**Description:** Student may contact the instructor or department for information.

**GLBT 4403 Queering Theory**  
3 credit(s);  
Instructor: STAFF  
**Description:** Theories exist to explain some range of phenomena; they aim at clarification, at bringing order to conceptual chaos. Identities do much the same for our lives; they impose a structure on the disparate stuff of experience. "Queer" names neither a theory nor an identity; it is antithetical to both. But even if we can live without theories (which is doubtful), we cannot live without theorizing, and similarly, even if we can live without identities (also doubtful), we cannot live without identifying (ourselves and others). Queering, as an activity and an orientation, may start by dismantling particular, oppressive theories, identities, and other normalizing devices; but beyond those specific dismantlings - which leave open the possibility of embracing better theories and non-oppressive identities - is a commitment to unsettling what we cannot do without, the ground underneath our feet, whatever it might be. This class starts from the idea that such unsettling, however paradoxical, is intellectually exciting and politically liberatory, but that we risk not just digging up the ground under our own feet, but - far more troublingly - digging up the ground under the feet of others, including some whose allies we take ourselves to be, whose standing may be far more perilous than our own. Our aim will be to productively puzzle over these ideas.

**Gender, Women, and Sexuality Studies 425 Ford Hall**

**GWSS 1003W Women Write the World**  
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature; meets CLE req of Writing Intensive  
Instructor: Kaminsky, Amy K  
**Description:** By reading short stories, essays, and poetry by women from different parts of the world and from a range of time periods we address core concepts both in literary studies and gender, women, and sexuality studies. We study all of these in a comparative way, to understand how the specificities of nation, culture, and history affect and inflect literary writing. By the same token, we will look at gender as it relates to the nature, activity, and forms of creative writing and reading, and how these vary across cultures and world regions.  
**Style:** 15% Lecture, 60% Discussion, 25% Small Group Activities.  
**Grading:** 70% reports/papers, 30% reflection paper.

**GWSS 1004 Screening Sex: Visual and Popular Culture**  
3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Lewis, Brittany Michee  
**Description:** According to the discourses of identity politics, minority visibility and positive representations are instrumental to the fight for civil rights. Post-structuralist theory, by contrast, teaches us that visible identities and meanings are highly constructed and contingent, positioning transparency as politically suspect. This course counterpoises these viewpoints, exploring the questions entangled in negotiating a politics of representation. Who is seen and who isn't? Can interpretation go beyond stereotypes? Does visibility work as a political tactic? How are we situated as media content and consumers? Overall, we will ask how different media forms and their intersections open or close possibilities for progressive representation, reception, and political change. Course Goals: This course is designed to introduce students to the field of feminist media studies, through the lens of gender, race, and sexuality. Students will be introduced to the basic terminology, history and theoretical issues, through appropriate readings and corresponding visual and popular media. The readings and lectures will guide students to examine media through the connections between various social relations like gender, sexuality, race and class. The syllabus is organized thematically, and students will be introduced to various
theoretical phases and debates within the field of feminist media and film theory. The syllabus will survey the concepts of popular culture, filmic form, spectatorship, technology and modernity, genre, feminist critique, realism, empire, and new media. Students will be equipped to consider films and other popular media as cultural texts which are structured and shaped by economic, technological, social and ideological contexts. Students will gain an understanding of how media shapes subjectivity, citizenship, and nation through representation, identification, visualities, and/or narratives. The course is designed to enable students to analyze popular media critically, rather than as passive consumers of information. The students will be introduced not only to the structure and styles of mainstream media representations but also to the politics therein. With a focus on constructions of race, gender, and sexuality, the course also offers examples of media that are produced in resistance to and outside of the mainstream culture, to illustrate the possibilities of alternative and more socially conscious representations. It is an introductory course that surveys various issues regarding race, gender and sexuality in the media, and equips students for more rigorous and complex inquiries in a higher level course on media analysis. Hence students will gain a critical media literacy that will allow them to engage and understand dominant and alternative media in the US.

**Style:** 70% Lecture, 30% Discussion.

**GWSS 1005 Engaging Justice**

3 credit(s); Meets CLE req of Civic Life and Ethics

**Description:** This course provides an interdisciplinary overview of how feminists have conceptualized, theorized, and critiqued ethics in relation to the politics of difference. Included in these are the ethics of care, reconciliation, forgiveness, and community restoration. We consider communicative understandings justice and politics that have roots outside of Western liberalism. Engaging Justice requires students to think about questions of fairness and justice with close attention paid to how social location, identity formation, and gendered hierarchies of difference inform politics and ethics. For example, we consider how women of color have developed oppositional discourses to challenge human rights abuses, environmental degradation, the legal vulnerability of non-citizens, and the abuse and denigration of sexual minorities across the globe. We also consider how feminists and queer people of color engage the politics of belonging, homemaking, and border-crossings, emphasizing how multiple, conflicting, and diverse human subjectivities inform diverse social and political practices. This course fulfills the liberal education requirement for diversity and civil life and ethics.

**Style:** 30% Lecture, 10% Film/Video, 40% Discussion, 20% Small Group Activities.

**Grading:** 20% mid exam, 20% final exam, 30% reports/papers, 15% attendance, 15% class participation.

**Exam Format:** The mid-term and final exam will consist of two parts. Part 1 is in-class, multiple choice. Part 2 is a take-home essay exam.

**GWSS 1007 Introduction to GLBT Studies**

3 credit(s); Credit will not be granted if credit has been received for: GLBT 1001; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences

**Instructor:** Petocz, Jessica Marie

**Description:** GLBT Studies is a rapidly growing, multidisciplinary enterprise whose goal is the study of lesbian, gay, bisexual, transgender, and queer peoples and their histories and cultures, as well as the study of sexuality and its role in the deployment of cultural and social power. This course offers an introduction to this vibrant field from a range of theoretical and disciplinary perspectives. It explores the role of race, class, religion, region, and nation in the construction of modern gender and sexual identities and in the lived experiences of dissident genders and sexualities. We will examine a range of issues, including histories and strategies of resistance; the role of feminism in GLBTQ Studies; transgender and transsexual theory and politics; queer of color critique; AIDS theory and politics; globalization and sexuality; the meanings of new GLBTQ visibility; and recent conceptualizations of homonormativity.

**GWSS 3003 Gender and Global Politics**

3 credit(s); Meets CLE req of Global Perspectives; Meets CLE req of Social Sciences

**Instructor:** STAFF

**Description:** Gender and Global Politics is an exciting class that uses current events to explore questions of gender and globalization that are central to the social sciences. In seeking to understand the interconnectedness entailed in 'global politics,' this course focuses on concepts, such as discursive violence, the problem of speaking for others, 'critical global literacy,' and intersectionality - particularly the intersections of gender, race, class, sexuality, and nation - as they emerge through the popular discourse, policy, and material practices surrounding current global situations. An in-depth understanding of globalization and development, 'third world' and differential feminisms, violence and human rights, all serve to further unpack the ways in which power and difference operate to create shifting socio-political hierarchies in various locations. The course satisfies the social science (core) and global perspectives (theme).

**GWSS 3102W Feminist Thought and Theory.**

3 credit(s); Meets CLE req of Arts/Humanities; Meets CLE req of Civic Life and Ethics; Meets CLE req of Writing Intensive

**Instructor:** Zita, Jacquelyn N

**Description:** What is theory? What is a feminist theory? How do different feminist theories help create alternative ways of
understanding reality and our experience in the world? This course will provide students with a firm foundation in contemporary feminist theory on gender, sexuality, race, culture and power. Students will study an array of different theoretical perspectives and explore cutting edge contemporary issues and controversies in feminist theoretical work. The purpose of the course is develop student skills in reading theory, understanding high-level theoretical terms, following the mind maps in theoretical writing, and learning to apply different kinds of theory to real life situations. This course offers an invaluable and useful gateway for students interested in women's studies, gender studies, LGBT studies, sexuality studies, cultural studies, film theory, and social justice struggles.

**Style:** 80% Lecture, 20% Discussion.

**Grading:** 60% reports/papers, 20% quizzes, 20% class participation.

**GWSS 3203W Blood, Bodies and Science**

3 credit(s); Meets CLE req of Social Sciences; meets CLE req of Technology and Society; meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** This course is a critical engagement of Science Studies through the categories of race, gender, sex and sexuality. The course examines the historical and contemporary technologies that transform social relations of sex, gender, and race and human biology, products like Viagra, institutions like public health, and academic disciplines like genetics, to better understand how science has made our lives better through these technologies. Simultaneously this course examines how these same technologies worked to maintain and even create social inequality. Specifically we examine how scientific understandings of bodies, disease, life-processes, and desires shape how we understand who we are and our relations to others for the distribution of resources and the valuation of human life. The course resists the idea that the production of knowledge is objective. Often the products of racism, sexism, and homophobia produced in the pursuit of knowledge are explained as aberrations in the scientific method, as the moments were society and politics corrupts the production of truth in the scientific method. This class recasts this relationship and uncovers how scientific endeavors have often been driven by the production and reproduction of these social hierarchies based on the categories of sex, skin, and genes. This class argues that racism, sexism, and homophobia in their modern forms are technologies of liberalism developed through science and not their unresolved remainder. The goal of this course is two fold. First the student will learn the impacts of science and technology in the production of social inequality. Second the student will learn how to critically engage specific scientific methodologies. Students will deal with primary and secondary materials common in the social sciences, and will learn how to "read" and understand basic scientific research, including basic understandings of genetics or epidemiological modes of data collection. Students will be exposed to and learn how to analyse the following qualitative and quantitative approaches: discourse and text analysis, statistics, case study, epidemiological methods such as clinical trials, disease tracking and interpretation, contact tracing and disease reporting, and scientific research such as genetics. By exploring the history of these methods the student will gain a better understanding of how the production of scientific knowledge occurs and how it is translated into technologies that inform our social worlds.

**GWSS 3290 Topics: Asian American Health and Research**

A-F only, 3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Kwon, Melissa

**Description:** This course provides intensive training in social science research methods within the context of Asian and Pacific Islander (API) women and public health. Students will learn about API women's health issues both locally and nationally. They will then apply this knowledge by actively researching a women's health topic that most affects the UCI campus community. Students will be required to work collaboratively to conduct community-based research and analyze and interpret data. Students are highly encouraged to continue on to the next sections of this course, in which students will conduct social action projects based upon the research findings obtained in this class. Students' personal experiences and perspectives will be critical in completing class assignments and fully participating in class. The full year long course will combine research, advocacy, and leadership development using the frameworks and principles of public health and social justice. Instructor: Dr. Melissa Kwon is a Research Associate for the Center for Applied Research and Educational Improvement in the College of Education and Human Development at the University of Minnesota, Twin Cities. Dr. Kwon earned both her MA in Education with an emphasis in Research Methodology and her PhD in Education with an emphasis in Cultural Perspectives and Comparative Education from the University of California, Santa Barbara (UCSB). She has taught various courses in the Departments of Asian American Studies and Education at UCSB, including Asian American Gender & Sexuality, Asian American Migrations since 1965, Asian American Literature, and Research on Teaching & Learning in Sociocultural Contexts. Her research focuses on Asian American college student experiences in higher education.

**GWSS 3301W Women Writers**

3 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** Hell hath no fury like a woman scorned? Women writers across different spatio-temporal locations have explored this pronouncement in their writings, either reading it as an unfair indictment or exemplifying and reinforcing its presumed truth. This course continues the examination of betrayal, while shifting the focus from women being betrayed to women caught between fidelity and betrayal. How do they negotiate the indeterminacy of their positions? This focus on relationships becomes the first axis of inquiry in our course, as we peel back the layers of complexity in the relationships portrayed. The second axis of inquiry shifts focus yet again from interpersonal relationships to women's self-perception in society. What does it mean to conform to or betray a certain idea of
GWSS 3302 Women and the Arts
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: What is the relationship between art, media, and social justice? How do artists position themselves and their art in relation to social change? How are artists experimenting with form and subject not only to respond to existing social inequities, but to also imagine alternative ways of being? And how do projects by contemporary artists complement, complicate, and contest one another? This class takes up these questions with regard to women artists (cisgendered and transgendered) and female bodied-artists who may not identify within the male-female gender binary. (In some cases, we will discuss the work of male-identified artists where their work intersects with the themes of the class.) Thinking through various art forms (the visual, performance-based, dance, the spoken and written word, music, film and mixed-media) we will explore how these artists contest and complicate notions of gender and genre as they intersect with questions of identity (such as race, class, ability, sexuality, religion, nation) and political commitments. While we will engage with artists from a wide range of social and geopolitical spheres, we will also engage on the local level, taking particular advantage of the vibrant arts scene in the Twin Cities. Because art cannot simply be "studied", but is also intrinsically linked with experience, audience and engagement, in addition to reading key pieces of feminist and queer art criticism, a central part of the course will be devoted to attending, reflecting, and discussing local arts events in the community. Students will be asked to attend at least 4 arts events during the semester. The majority of writing will be reflective and/or creative, allowing students to work through and respond to questions and themes addressed in the works we engage throughout the semester.

GWSS 3306 Pop Culture Women
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Isoke,Zenzele
Description: This undergraduate course will provide a comprehensive overview of contemporary cultural critiques of gender, sexuality, and hetero-patriarchy by scholars and activists of the hip-hop generation. We will consider the use of hip-hop as a form of cultural and political activism that forces Americans to confront key social justice issues including: sexual and gender violence, homophobia, and destructive representations of black and brown masculinity and femininity in the U.S. and Arab Regions. We will explore how hip hop has sparked and enabled protest and translocal movement making. The heavy interplay between race, gender, sexuality, and the criminalization of people of color in mainstream media is a core theme that will be revisited throughout the course. Students will learn to reject the tendency to equate hip hop with rap music. Instead, we explore the ways that hip hop has shaped the culture, aesthetics, experiences, and perspectives of an emergent generation of social critics who aim to challenge large scale social inequalities in national and transnational contexts. This course will showcase the perspectives of hip hop feminists: female and transgender writers, performers, activists, students, and teachers who have come of age in the era of hip hop, and who courageously attempt to politicize the presence of the gendered body, standpoint, and worldview within and beyond the original four elements of the genre (rap, graffiti, emceeing, dee-jaying).

GWSS 3390 Topics: Visual, Cultural, and Literary Studies: Novels and Nations
3 credit(s), max credits 6;
Instructor: Kaminsky,Amy K
Description: Virginia Woolf described fiction as a spider's web, "attached ever so lightly perhaps, but still attached to life at all four corners." If the web is pulled from its moorings it collapses into a sticky mass, yet to look only to the places and ways it attaches to the wall of reality is to miss the complexity of the web itself. This class teaches students to explore and enjoy the intricacies of the web of fiction without losing sight of the structures that hold it up. Among the questions we ask are: What is the relation between the nation and the literature produced within it? How do emerging nations enlist literature in their claims for nationhood? How does the institution of literature underpin Empire? How does gender, as an organizing principle of identity, inflect literary representations of the nation? We will examine these and other questions in relation to narrative fiction. The course is also designed to familiarize students with the conventions and inner workings of literary texts. A major goal of the course is to give interdisciplinary students in Global Studies, much of whose curriculum leans toward the empirical and theoretical world of the social sciences, the tools to understand the pleasure of reading, the ways a literary text works, and its privileged position as an apparatus of representation.
Style: 35% Lecture, 50% Discussion, 15% Small Group Activities.
Grading: 55% reports/papers, 40% reflection paper, 5% class participation. The term "reflection papers" here refers to the 10 responses to the readings, worth 4% each.
Exam Format: No exams

GWSS 3406 Gender, Labor, and Politics
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
GWSS 3410 American Indian Women: Ethnographic and Ethnohistorical Perspectives
A-F only, 3 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: STAFF
Description: This class centers on Chicanas or politically defined women of the Mexican American community. Our method is interdisciplinary. It emphasizes the importance of historical context and cultural process to any discussion of the Chicana experience.

GWSS 3415 Feminist Perspectives on Domestic Violence and Sexual Assault
A-F only, 3 credit(s);Meets CLE req of Diversity and Soc Justice US
Instructor: Schuster, Mary Lay
Description: This course focuses on the history of and contemporary thinking about activism, social change, public policies, and legal remedies directed toward sexual assault and domestic violence in the US, particularly from the point of view of feminist perspectives. The course deals, for example, with how notions of privacy and assumptions about traditional gender roles contribute to attitudes toward stranger sexual assault and intimate partner violence. Readings in the course offer insight into early links between slavery and rape, between the temperance movement and domestic violence, and between views of child abuse and sexual abuse, as well as the increasing roles of psychiatry and social work in addressing such violence. The course traces how these historical foundations and cultural attitudes help determine contemporary responses by legal officials, and the course covers such diverse topics as the impact of HIV/AIDS on rape survivors; sexual abuse of men in prison; incest; child abuse; and sex offender treatment. Students read a memoir (Alice Sebold's Lucky) about surviving sexual assault and view a film (The Accused) as well as reading historical and analytical texts. Students will visit the domestic violence court in Hennepin County, and the course ends with a close look at a project by the president of William Mitchell Law School on sexual predator laws, such as civil commitment and community notification, in terms of their effectiveness, feminist perspectives, and impact on Constitutional rights. Other speakers include the executive director of the non-profit courtroom monitoring organization, WATCH, and the head of the Minneapolis Police Department Sex Crimes Unit.
Style: 5% Film/Video, 75% Discussion, 10% Small Group Activities, 5% Guest Speakers.
Grading: 25% mid exam, 30% final exam, 5% reports/papers, 10% quizzes, 20% reflection paper, 10% class participation. Exams are essay take-home exams.

Instructor: Torres PhD, Eden E.
Description: This course explores historical developments and contemporary manifestations of women's participation in the labor force and the global economy. It looks at gender as a socially constructed category that intersects and overlaps with race, class, ethnicity and nationality among other things in determining what it means to be a woman in the labor force and in setting up expectations for wages. It contemplates gender as a condition for the creation and maintenance of an exploitable category of workers, as well as the way in which women's choices are shaped in various geographical and cultural locations. Our study includes an examination of the way women respond to gender oppression, police other women for compliance, submit to oppression for a variety of socioeconomic reasons, and/or develop a political consciousness of their social locations to become labor organizers and activists.
Style: 20% Lecture, 60% Discussion, 10% Small Group Activities, 10% Student Presentation.
Grading: 30% reports/papers, 20% attendance, 20% reflection paper, 20% in-class presentation, 10% class participation. Quizzes are part of participation/attendance grade.

GWSS 3407 Women in Early and Victorian America: 1600-1890
3 credit(s);Credit will not be granted if credit has been received for: HIST 3347;Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Norling, Lisa A
Description: Wenches, witches, goodwives and warrior women! Introduction to all sorts of Early American women -- and the men in their lives, too -- and the powerful dynamics of gender and race in American history, 1600-1880. For any student; no background knowledge necessary. Topics include women's involvement in--and the impact on women of--European colonization in the Americas and the dispossession of native peoples, slavery, Revolution and nation-building, social reform, economic and technological change, westward expansion and Civil War, and transformations in politics and law, education, family life, gender roles, and sexuality. Course organized primarily as lecture with occasional films, large-group student discussion, in-class exercises. Average of 60-80 pages of reading per week, three short take-home essays, two exams.
Style: 80% Lecture, 20% Discussion.
Grading: 15% mid exam, 20% final exam, 50% reports/papers, 15% quizzes.
Exam Format: short identification, essay
GWSS 4103 Transnational Feminist Theories
3 credit(s); Meets CLE req of Global Perspectives
Instructor: STAFF
Description: What is the transnational, and why is it such an important area of study today? In this course, we will explore the term in relation to feminist theories and activisms, focusing particularly on the following aspects: * distinctions among the transnational, the international, and the global * the advantages and challenges of transnational activism * universal rights versus cultural particularity * resisting and participating in hegemonic feminism(s) * the role of the UN and other organizations Over the course of the semester, we will learn to navigate the complex terrain of agency and resistance, local and global processes, and critiques of power and violence.

GWSS 4122 Philosophy and Feminist Theory
3 credit(s); 8 crs in [philosophy or women's studies] or instr consent
Credit will not be granted if credit has been received for: PHIL 4622;
Instructor: Scheman, Naomi
Description: This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of "post-positivist realism," critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970's had provided a central example for a 1993 paper of Satya Mohanty's that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.
Style: 40% Lecture, 60% Discussion.
Grading: 55% reports/papers, 45% reflection paper. web and in-class participation can improve one's grade
Exam Format: N/A

GWSS 4403 Queering Theory
3 credit(s); 1002 or 3102 or instr consent
Credit will not be granted if credit has been received for: GWSS 5503;
Instructor: STAFF
Description: Theories exist to explain some range of phenomena; they aim at clarification, at bringing order to conceptual chaos. Identities do much the same for our lives; they impose a structure on the disparate stuff of experience. "Queer" names neither a theory nor an identity; it is antithetical to both. But even if we can live without theories (which is doubtful), we cannot live without theorizing, and similarly, even if we can live without identities (also doubtful), we cannot live without identifying (ourselves and others). Queering, as an activity and an orientation, may start by dismantling particular, oppressive theories, identities, and other normalizing devices; but beyond those specific dismantlings - which leave open the possibility of embracing better theories and non-oppressive identities - is a commitment to unsettling what we cannot do without, the ground underneath our feet, whatever it might be. This class starts from the idea that such unsettling, however paradoxical, is intellectually exciting and politically liberatory, but that we risk not just digging up the ground under our own feet, but - far more troublingly - digging up the ground under the feet of others, including some whose allies we take ourselves to be, whose standing may be far more perilous than our own. Our aim will be to productively puzzle over these ideas.

GWSS 4690 Topics: Women, Society, and Race in the United States
3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

GWSS 5104 Transnational Feminist Theory
3 credit(s);
Instructor: STAFF
Description: What is the transnational, and why is it such an important area of study today? In this course, we will explore the term in relation to feminist theories and activisms, focusing particularly on the following aspects: * distinctions among the transnational, the international, and the global * the advantages and challenges of transnational activism * universal rights versus cultural particularity * resisting and participating in hegemonic feminism(s) * the role of the UN and other organizations Over the course of the semester, we will learn to navigate the complex terrain of agency and resistance, local and global processes, and critiques of power and violence.

GWSS 5122 Philosophy and Feminist Theory
PHIL 4622; 3 credit(s); 8 crs in [philosophy or women’s studies] or instr consent
Credit will not be granted if credit has been received for:
PHIL 4622;
Instructor: Scheman, Naomi
Description: This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of "post-positivist realism," critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970's had provided a central example for a 1993 paper of Satya Mohanty's that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.
Style: 40% Lecture, 60% Discussion.
Grading: 55% reports/papers, 45% reflection paper. web and in-class participation can improve one's grade
Exam Format: N/A

GWSS 5290 Topics: Biology, Health, and Environmental Studies: Foundations in Disability Studies
3 credit(s);
Instructor: Lubet, Alex J
Description: Student may contact the instructor or department for information.

GWSS 5390 Topics: Visual, Cultural, and Literary Studies: Black Women Writers in the Diaspora
3 credit(s), max credits 6;
Instructor: Githire, Njeri R
Description:

GWSS 8102 Advanced Studies in Sexuality
3 credit(s);
Instructor: Kunzel, Regina G
Description: This course brings historical work on gender and sexuality (with an emphasis on U.S. contexts) into conversation with scholarship in interdisciplinary sexuality and queer studies. It is organized around themes and questions that animate recent scholarship on gender and sexuality that engages the past, broadly construed. Because gender and sexuality are structures through which race, migration, citizenship, empire, subjectivity, knowledge, identity, and embodiment are produced and circulated, we will also read work in which gender and sexuality are not central categories of analysis. We will think closely about methodologies used in the historical study of sexuality and gender, and about the challenges posed by those histories to historical methods. Bringing together foundational scholarship and pathbreaking recent work, our readings invite examination of the interactions between historical and theoretical approaches and the ways these interactions push scholarship in new directions.

GWSS 8109 Feminist Theories and Methods II
3 credit(s);
Instructor: Nagar, Richa
Description: Please note that the time of this course has been changed to 3:00-5:30pm on Wednesdays; the schedule will be updated to reflect this after April 1st, 2012.

GWSS 8996 Feminist Studies Colloquium
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Scheman, Naomi
Description: Student may contact the instructor or department for information.

General Dentistry 15-209 MoosT

GenD 5152 Advanced General Dentistry Seminar II
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 5255 Advanced General Dentistry Clinic II
S-N only, 5-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 5262 Advanced General Dentistry Clinical Administration II
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 5265 Advanced General Dentistry Clinic V
S-N only, 1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 6152 General Practice Seminar II
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 6255 General Practice Clinic II
S-N only, 10-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 6262 General Practice Clinical Administration II
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

GenD 6265 General Practice Clinic V
S-N only, 10-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Gambucci, James Robert
Description: Student may contact the instructor or department for information.

Genetics, Cell Biology and Development
6-160 Jackson Hall

GCD 2002 Ethical and Social Challenges in Genetics
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: LeRoy, Bonnie S
Description: Genetics and genomics offer deep insights into the nature of life and provide technologies to diagnose and treat diseases, to manipulate, modify, and create animal and plant life, and to understand our origin as human beings. This course will focus on introducing, at a basic level for scientists and non-scientists, molecular biological principles and genetic technologies that are the foundation for advances in medicine and their application to society. About half of the course will focus on methods and approaches used in modern genetics and genomics and the other half on ethical and social issues that these advancements in genetics are bringing into our everyday lives. Educational materials will be highly interdisciplinary. These will include scientific review articles from leading scientific journals, newspapers, and magazines. Some readings will both introduce and teach the underlying scientific basics of genetic and genomic analysis, whereas others will highlight societal, ethical, and legal issues arising from the technology. For example, we will read "My Genome, My Self" by Steven Pinker, which is a thought provoking essay on impacts of the personal genome project on the individual. We will utilize a variety of websites that contain computer simulations or videos. Students will write two 5-page papers on current and pending social issues. The first will be on the book The Immortal Life of Henrietta Lacks by Rebecca Skloot and the second on the Hollywood movie, GATTACA. Students will actively engage each other on specific issues that relate to the lectures, readings, and group work sessions. Students will confront new dilemmas posed by these technologies, being among the first generations that have to deal with the ethical, social, and legal impacts of genetic and genomic technologies. The course examines genetic and genomic technologies and their impact on contemporary society. The course builds student understanding of the science behind genetic and genomic technologies. A students you will discuss the role that society has played in fostering the development of genetic and genomic technologies as well as the response to the adoption and use of these technologies. You will consider the impact of genetic and genomic technologies from multiple perspectives that include developers, users/consumers, as well as others in society affected by the technology. Students will develop skills in evaluating conflicting views on existing or emerging technology. As an example, the class considers the technology, logic, ethics, and policies underlying the use of animals in research. Students engage in
a process of critical evaluation that provides a framework with which to evaluate new technology in the future. Grading: 2 papers (150 pts), In-class quizzes (100 pts), Problem Sets (150 pts), Blogs (100 pts)  
**Style:** 50% Lecture, 20% Discussion, 30% Small Group Activities.  
**Grading:** 30% reports/papers, 20% quizzes, 30% written homework, 20% other evaluation. Blogs - 20%

**GCD 3022 Genetics**  
3 credit(s); BIOL 1002 or BIOL 1009  
**Credit will not be granted if credit has been received for:** BIOL 4003;  
**Instructor:** Shaw, Jocelyn E  
**Description:** Student may contact the instructor or department for information.

**GCD 3022 Genetics**  
3 credit(s); BIOL 1002 or BIOL 1009  
**Credit will not be granted if credit has been received for:** BIOL 4003;  
**Instructor:** Brooker, Robert James  
**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This course is intended to provide students with a broad understanding of genetics. In the first part of the course, the emphasis will be on inheritance patterns. We will be interested in many types of inheritance patterns, including simple "Mendelian" inheritance, extrachromosomal inheritance, linkage, and quantitative traits that are determined by multiple genes. We will then examine the structure, replication, and expression of the genetic material known as deoxyribonucleic acid (DNA). This will involve an understanding of the molecular structure of DNA and its organization into units called genes. The last part of the course will examine genetic technologies.  
**Style:** This is a printed correspondence section.  
**Grading:** 45% mid exam, 45% final exam, 10% written homework.  
**Exam Format:** Supervised, in-person exams

**GCD 3022 Genetics**  
3 credit(s); BIOL 1002 or BIOL 1009  
**Credit will not be granted if credit has been received for:** BIOL 4003;  
**Instructor:** Bagchi, Anindya  
**Description:** This course is intended to provide an overview of genetics. The areas that will be covered include general principles of Mendelian, population, and molecular genetics. A portion of the course will also be devoted to developing problem-solving skills applicable to genetics and to the design of molecular and cellular experiments. Students are expected to have already taken an undergraduate course in General Biology.

**GCD 3033 Principles of Cell Biology**  
A-F only, 3 credit(s);  
**Instructor:** Neufeld, Thomas Peter  
**Description:** Introduction to the components and activities common to eukaryotic cells. Focus on structures such as chromosomes, membranes, organelles and the cytoskeleton, and processes including cellular communication, replication, motility, transport and gene expression. Emphasis on relevance to human health and medicine. Appropriate for non-CBS majors.

**GCD 4161 Developmental Biology**  
3 credit(s);  
**Instructor:** Rougvie, Ann E  
**Description:** This course is intended for upper level undergraduates who have had previous courses in genetics and cell biology and who have an interest in understanding developmental mechanisms. The course will present a comprehensive discussion of developmental biology with emphasis on recent findings, particularly concerning the molecular mechanisms involved. The course will focus on development in model organisms, including nematodes, fruit flies, mice, zebrafish, frogs, and chicks, as well as discussion of human development as appropriate. Students will learn fundamental regulatory mechanisms common to developmental programs in most animals, in addition to understanding the differences that exist among species. Topics to be covered include fertilization, formation of the body plan, sex determination, limb formation, regeneration, and developmental disruptions caused by teratogens. Experimental approaches to development will be emphasized. The textbook utilized will be Scott Gilbert’s, “Developmental Biology,” 8th edition, 2006. The course is web-enhanced, with a course website, as well as a textbook website (http://www.devbio.com/).  
**Style:** 90% Lecture, 10% Discussion.  
**Grading:** 52% mid exam, 34% final exam, 14% problem solving.  
**Exam Format:** Essay, some short answer

**GCD 4793W Directed Studies: Writing Intensive**  
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive  
**Instructor:** LeRoy, Bonnie S
GCD 4793W Directed Studies: Writing Intensive
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Petryk, Anna
Description: Student may contact the instructor or department for information.

GCD 4793W Directed Studies: Writing Intensive
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Chen, Lihsia
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Weisdorf, Daniel J
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Gale MD, Cheryl Ann
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Largaespada, David Andrew
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Thomas, Kathleen M
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: O'Connor PhD, Michael B
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Porter, Mary E
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Berman, Judith G
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Simmons, Michael J
Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Vallera PhD, Daniel A.
Description: Student may contact the instructor or department for information.
GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Kuriyama, Ryoko
   Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Titus, Margaret A.
   Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Kirkpatrick, David T
   Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Mermelstein, Paul G
   Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Somia, Nikunj V
   Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Hall, Jennifer L
   Description: Student may contact the instructor or department for information.

GCD 4794W Directed Research: Writing Intensive
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
   Instructor: Firpo, Meri
   Description: Student may contact the instructor or department for information.

GCD 4993 Directed Studies
   S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
   Instructor: LeRoy, Bonnie S
   Description: Student may contact the instructor or department for information.

GCD 4993 Directed Studies
   S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
   Instructor: Chen, Lihsia
   Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
   Instructor: Iaizzo PhD, Paul Anthony
   Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
   Instructor: Mc Ivor, R Scott
   Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
   S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
   Instructor: Starr, Tim
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Kren,Betsy Jean
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Largaespada,David Andrew
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gardner,Melissa Klein
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Neufeld,Thomas Peter
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Patterson DVM,Ned
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Tolar,Jakub
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Simon,Jeffrey A
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Berman,Judith G
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Zarkower,David A
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Simmons,Michael J
Description: Student may contact the instructor or department for information.
GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Lefebvre, Paul A
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Panoskaltsis-Mortari PhD, Angela
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Hering, Bernhard J.
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Stephens, David William
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Low, Walter C.
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Titus, Margaret A.
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Yee, Douglas
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Ferrington, Deborah Ann
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Sachdev, Deepali
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Kirkpatrick, David T
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Somia, Nikunj V
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Liao PhD, Dezhi
GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Chen, Lihsia
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Zhou, Xianzheng
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Koepp, Deanna
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Nakato, Hiroshi
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Conner PhD, Sean
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Fleischmann, William Robert
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Firpo, Meri
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gralnick, Jeffrey A
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Greenstein, David I.
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Travisano, Michael
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Huang, Haojie
Description: Student may contact the instructor or department for information.
GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Schwertfeger,Kaylee
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gammill,Laura Susan
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Masino,Mark A
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Divani,Afshin Andre
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Voytas,Daniel F
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Kawakami,Yasuhiko
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Bagchi,Anindya
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Bailey,Jake
Description: Student may contact the instructor or department for information.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Luxton,G.W. Gant
Description: Student may contact the instructor or department for information.

GCD 5036 Molecular Cell Biology
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

GCD 6110 Medical Genetics
A-F only, 2-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Schimmenti MD,Lisa A
Description: (2.0 cr or 6.0 cr; Prereq-Enrolled as medical student or genetic counseling graduate student or equivlaent fall, every year)
This course introduces students to the practice of genetics in medicine. The major focus of the course involves molecular genetics, modes of inheritance, metabolic genetics, genetics and birth defects, cancer genetics and genetic counseling. Students will hear from genetics patients, discuss ethical challenges in the practice and gain an appreciation for how genetics plays a role in all disease and disability. If taken for the full 6 credits, this course also covers genome organization, gene transcription, metabolism, stem cell biology,
development, cancer and cell signaling.

GCD 8151 Cell Structure and Function
3 credit(s);
Instructor: Hays, Tom S
Description: Student may contact the instructor or department for information.

GCD 8171 Literature Analysis
A-F only, 2 credit(s);
Instructor: Conklin, Kathleen F
Description: Student may contact the instructor or department for information.

GCD 8900 Seminar
S-N only, 1-2 credit(s), max credits 8, 4 completions allowed;
Instructor: Somia, Nikunj V
Description: Student may contact the instructor or department for information.

GCD 8913 Psychosocial Issues in Genetic Counseling
A-F only, 3 credit(s);
Instructor: LeRoy, Bonnie S
Description: Student may contact the instructor or department for information.

GCD 8920 Special Topics: Introduction to topics in genetic counseling
1-4 credit(s), max credits 8;
Instructor: Ahrens, Mary Jarvis
Description: Student may contact the instructor or department for information.

GCD 8933 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: Hirsch, Betsy Anne
Description: Student may contact the instructor or department for information.

GCD 8993 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: Hirsh, Elizabeth D
Description: Student may contact the instructor or department for information.

GCD 8994 Research
S-N only, 1-5 credit(s), max credits 20, 20 completions allowed;
Instructor: LeRoy, Bonnie S
Description: Student may contact the instructor or department for information.

Geographic Information Science

GIS 5530 GIS Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: McMaster, Susanna Akiko
Description: This course enables students in the MGIS program to earn 1-3 credits for work completed in conjunction with a GIS-related internship. Students must identify a faculty sponsor from the MGIS faculty and complete an internship contract as part of this registration process.

GIS 5555 Basic Spatial Analysis
3 credit(s);
Instructor: Manson, Steven M.
Description: Subject. Spatial analysis is used to understand a range of human and environmental systems, their patterns and dynamics, and their interactions with the broader world. Students. Students in this course have tended to come from across the social, natural, and information sciences with no clear majority in any one area. This distribution makes for a lively and challenging meeting of the minds. The course is oriented towards Masters, MGIS, or PhD students. Advanced undergraduates are invited to speak with the
instructor to determine if they would find the course appropriate to their educational goals. Purpose. This course expands on aspects of GISc and statistics covered by previous courses. It is designed to give hands-on experience with advanced methods in geographic, spatial, and statistical research. Goals. Students who successfully complete this course will be able to use a range of spatial analysis tools to explore the patterns and dynamics of almost any problem that has a spatial element. Depending on student orientation, this course can be used to gain insight into the technical underpinnings of introductory spatial analysis, complement on-going research, or provide an applied focus for research or policy. Prior experience. Students should be proficient in GIS, basic mathematics, and standard statistical methodology including descriptive statistics and bivariate regression. As noted above in the prerequisites, this translates into having at least one statistics course and the Principles of GIS course or its equivalent. Students without this experience fare poorly in this course. Structure. This is an intensive hands-on class with a focus on reading, discussion, and applications. This translates into 30% Lecture, 20% Discussion, 50% Laboratory.

Style: 30% Lecture, 20% Discussion, 50% Laboratory.

Grading: 35% reports/papers, 10% class participation, 55% laboratory evaluation.

GIS 5571 ArcGIS I
3 credit(s);
Instructor: Lindberg, Mark B
Description: This is the first course in a two-course series examining ArcGIS Desktop, one of the most commonly used commercial GIS software packages. Our attention will focus on four areas: 1) an overview of ArcGIS functionality; 2) Python scripting for ArcGIS; 3) geometric transformations and map projections; and 4) data capture and editing. Students completing this course should leave with an understanding of how ArcGIS is structured, how it developed, some of the intricacies of its present design, and have the ability to continue learning on their own.

Style: 20% Lecture, 50% Laboratory, 30% Demonstration.

Grading: 20% special projects, 30% quizzes, 50% laboratory evaluation.

GIS 5573 Desktop Mapping
1.5 credit(s);
Instructor: Hansen, Catherine Lucia
Description: An introduction to desktop mapping fundamentals using ESRI ArcGIS software. This course emphasizes the display and analysis of geographical data. It is a perfect course for new users as well as advanced user looking to brush up on current changes in the software.

Style: 30% Lecture, 40% Laboratory, 30% Demonstration.

Grading: 25% special projects, 25% quizzes, 50% laboratory evaluation.

GIS 5574 GIS and the Internet
3 credit(s);
Instructor: Fischer, Brian Charles
Description: GIS 5574 is a 15 week introduction to the many ways GIS data, maps and applications can be used to provide content over the Internet. The course is geared towards students who are familiar with the World-Wide Web and that have a working knowledge of GIS. Students will gain experience through browsing of the web, and ultimately will develop their own web site and interactive mapping application. The course is an introductory level and assumes students have little to no experience in developing web pages and applications. The course will introduce students to different web mapping technologies, but is not meant to be a web programming course. Internet GIS or Web GIS is an constantly evolving technology. This course will present the wide variety of technologies available to Web GIS developers. The course will explore dozens of examples applications that deliver GIS content via the Internet. The main goal of the course is that students will have a general understanding of Web GIS technologies and be able to select and apply the appropriate technologies in a real-world setting. The course will cover examples of Web GIS software such as Google Maps API, Open Source Web GIS Software such as MapServer, ESRI ArcGIS Server and ESRI Web Mapping APIs. This course may also discuss other topics such as web services, interoperability and new concepts such as crowd sourcing. Finally the course will use GeoMOOSE (www.geomoose.org) and MapServer (www.mapserver.org) as the software packages to build their own web GIS application in a group classroom project.

Style: 40% Lecture, 10% Discussion, 30% Student Presentation, 20% Demonstration.

GIS 8501 Survey of Geographic Information Science: Past, Present, and Future Trends and Activities
3 credit(s);
Instructor: McMaster, Susanna Akiko
Description: This course is specifically designed for graduate students in the MGIS program. It will focus on two key topics critical to becoming a successful GIS practitioner, namely, project management and professional development. The first part of the course involves professional development in the form of portfolio creation, career exploration, degree program planning and more. The second portion of the course introduces important aspects of GIS project management through lectures, a major course project, in-class exercises and guest speakers. The three main objectives of the course are to (1) create and document your professional development
profile, (2) provide you with introductory exposure to GIS project management practices and case examples, and (3) to build
community among the entering group of MGIS students.

GIS 8990 Research Problems in GIS
A-F only, 1-6 credit(s), max credits 6, 3 completions allowed;
Instructor: Lindberg, Mark B
Description: Student may contact the instructor or department for information.

GIS 8990 Research Problems in GIS
A-F only, 1-6 credit(s), max credits 6, 3 completions allowed;
Instructor: McMaster, Susanna Akiko
Description: Student may contact the instructor or department for information.

GIS 8990 Research Problems in GIS
A-F only, 1-6 credit(s), max credits 6, 3 completions allowed;
Instructor: Harvey, Francis
Description: Student may contact the instructor or department for information.

GIS 8990 Research Problems in GIS
A-F only, 1-6 credit(s), max credits 6, 3 completions allowed;
Instructor: Manson, Steven M.
Description: Student may contact the instructor or department for information.

Geography 414 Social Sciences Building

Geog 1301W Our Globalizing World
4 credit(s); Credit will not be granted if credit has been received for: GEOG 1301V; Meets CLE req of Global Perspectives;
meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Bialostosky, Ivan Julius
Description: Student may contact the instructor or department for information.

Geog 1372 Geography of Global Cities
3 credit(s); Credit will not be granted if credit has been received for: GLOS 1672; Meets CLE req of Global Perspectives; meets
CLE req of Social Sciences
Instructor: Lindeke, William A
Description: Student may contact the instructor or department for information.

Geog 1403 Biogeography of the Global Garden
4 credit(s); Meets CLE req of Biological Sciences; meets CLE req of Environment
Instructor: Blumenfeld, Kenneth A
Description: Student may contact the instructor or department for information.

Geog 1425 Introduction to Meteorology
4 credit(s); High school algebra Credit will not be granted if credit has been received for: ESPM 1425; Meets CLE req of
Environment; meets CLE req of Physical Sciences
Instructor: Blumenfeld, Kenneth A
Description: Student may contact the instructor or department for information.

Geog 1502 Mapping Our World
3 credit(s); Meets CLE req of Social Sciences; meets CLE req of Technology and Society
Instructor: Manson, Steven M.
Description: We will learn about mapping our world by understanding how maps work, making our own maps, mapping virtual worlds
like Facebook, and understanding how people use maps to tell stories and lies. Along the way, we will see how mapping is a useful
lens through which to understand interactions between technology and society.
Style: 30% Lecture, 20% Discussion, 20% Small Group Activities, 30% Web Based. We will meet in person for lectures on Mondays
and hands-on work Wednesdays. Instead of meeting in person most Fridays, students will instead do online lab projects focused on
making maps.
Grading: 20% mid exam, 15% final exam, 15% class participation, 50% laboratory evaluation. We focus on participation in hands-on
class exercises, completing online labs, and two online exams.

Exam Format: Multiple choice and short answer.

Geog 1973 Geography of the Twin Cities

3 credit(s); Credit will not be granted if credit has been received for: GEO 1009; Meets CLE req of Social Sciences
Instructor: Pentel, Paula R
Description: This course is a survey of the historical and contemporary geographical patterns of the Twin Cities metropolitan area. Questions raised include: Where are things located? (industry, transportation, housing, people of diverse backgrounds and resources, retail trade and services) Why are they located as they are? What are things like at the neighborhood level and how have these changed over time? How do economic and demographic forces produce changes on the landscape? How do publicly sponsored planning and redevelopment programs try to correct the consequences of past actions? Class format is lecture and discussion. Questions are encouraged. Visual materials (power-point, overhead transparencies, slides, and occasional videos) will be used extensively. Course materials are the same for Geog 1973 and Geog 3973, but those registered in 3973 are expected to perform at a much higher level of analysis, and this will be reflected in the point scale for assignments. Two large field studies make up the bulk of the work and most of the readings are on E-reserve.

Style: 75% Lecture, 10% Film/Video, 10% Discussion, 5% Small Group Activities.
Grading: 15% mid exam, 25% final exam, 60% reports/papers.

Geog 3101 Geography of the United States and Canada

4 credit(s); Credit will not be granted if credit has been received for: GEOG 3102; Meets CLE req of Social Sciences
Instructor: Hart, John Fraser
Description: A visual tour of the continent, with ca. 80 slides in each lecture. Emphasis on the ways in which different groups of people have interacted with different physical environments to produce distinctive regions. Satisfies the Social Science Core and Cultural Diversity theme requirements. The instructor has a quirky sense of humor, and the lectures are interesting.

Style: 100% Lecture.
Grading: 60% mid exam, 30% final exam, 10% reports/papers.
Exam Format: Multiple choice based on maps

Geog 3141 Africa

3 credit(s); Credit will not be granted if credit has been received for: AFRO 3141;
Instructor: STAFF
Description: Geography of Africa introduces students to the human and environmental diversity of Africa, and examines the effects of internal and external forces on the spatial organization of Africa economies and societies. Geographic (case) studies are used to discuss important developmental issues, or changes that reflect modern trends and gender conditions. We examine selected regions and topics or themes in depth rather than to present general profiles of individual nations. This approach highlights the importance of culture in environmental and social change. Handouts (including current news reports), lecture units, slides/video documentaries and class discussions are used to provide the latest information available.

Style: 70% Lecture, 30% Discussion.
Grading: 20% mid exam, 40% final exam, 20% reports/papers, 20% other evaluation. 2 map-based quizzes, 10% each
Exam Format: mixed

Geog 3331 Geography of the World Economy

3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Gidwani, Vinay Krishin
Description: This course studies the historical and spatial dynamics of the global economy from the vantage point of economic geography. It traces ongoing transformations in the global economic map by exploring how differences in place, space, scale and networks affect the institutional forms, regional patterns, and world dynamics of economic activity. Why do we see the sectoral agglomeration of economic activity (for instance, high-tech in Silicon Valley or finance on Wall Street)? What forces inform Nike’s decision to manufacture shoes in Indonesia or GM’s decision to assemble cars in Mexico? Why does capital flow to some places and not to others? How does this affect workers and their livelihoods, both within the US and abroad? What are the changing patterns of finance, foreign investment and trade? What are the dynamics of international migration? Why do some policymakers think that international flows of capital should be taxed? How are environmental issues linked to global trade? Why is agroforestry a more efficient form of agriculture in some places than monocrop agriculture? How are new information technologies reshaping the geography of the world economy? These questions of the local, regional and global location of economic activity, the new forms of production, commerce and inequality that accompany economic diversification or concentration in space, and the spatial interconnectedness of resource flows are all aspects of the dynamic and exciting field of economic geography.

Style: 70% Lecture, 15% Discussion. Audio-visual media (film and documentary clips)
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 10% quizzes, 10% class participation.
Exam Format: Short definitions and short essays
Geog 3361W Geography and Public Policy
3 credit(s);Credit will not be granted if credit has been received for: BSE 3361W;Meets CLE req of Writing Intensive
Instructor: Squires,Roderick H
Description: Individuals, corporations, and governments use the nation's land surface, water, and air to produce goods (food products, houses, landmines, automobiles, software, and papercups) and to provide services (education, freedom, health, and welfare). In doing so they construct the artifacts that we see and create the places that we recognize. Landscapes, assemblages of artifacts, and places represent the outcome of rational decisions made by individuals, corporations, and governments. These decisions are made, in part, against a backdrop of the incessant, and often acrimonious, national debate concerning the role and responsibility of the federal government. To understand the decisions, and thus truly appreciate landscapes and places, we must understand how the federal government operates, how individuals in the legislative, administrative, and judicial branches of the government reach consensus and compromise about social goals and appropriate individual, corporate, and governmental behavior, and so create incentives, and disincentives, for certain types of behavior. We will pay particular attention to some of the documents that are produced during the national debate, the outcome of which is usually termed 'federal policy'. The course examines landscapes and places as political statements that reflect a past and a present and provide a basis for a future. Target audience, undergraduates in any major.
Style: 60% Lecture, 40% Laboratory.
Grading: 100% reports/papers.

Geog 3371W Cities, Citizens, and Communities
4 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Henderson,George Lawlor
Description: This course is about how structures of class, race/ethnicity, gender, and sexuality combine to produce varieties of urban experience in the United States. The course will also deal with why the city--why urbanization as a distinctive process--shapes those social structures in particular ways. The course centers especially on the city as a crucial locus for capitalism and on capitalism as irrevocably a socially made and contested process. It is a hallmark of capitalism that it leads not only to the making of different kinds of urban environments and histories. It also relies upon and fosters social differences. Through discussion, lecture, case study readings (including two books and a variety of articles), and group projects we will try to come to a more layered understanding of what makes the American city tick.
Style: 50% Lecture, 50% Discussion.
Grading: 30% mid exam, 30% final exam, 30% reports/papers, 10% class participation.
Exam Format: Exams are a combination of short answer and long essay.

Geog 3376 Political Ecology of North America
3 credit(s);Meets CLE req of Environment
Instructor: Simms,Nicole Colleen
Description: Student may contact the instructor or department for information.

Geog 3381W Population in an Interacting World
4 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Taylor,Marvin Paul
Description: The aim of this course is to provide students with a multi-disciplinary understanding of and appreciation for human population phenomena and problems in different parts of the world and at different geographic scales ? from the local to the global. This involves an investigation of the different components of population change - fertility, mortality and migration of human populations - and an engagement with different, often competing, explanations of these population phenomena that have been offered by social scientists. One of the major learning objectives is to create an awareness that in order to understand and explain population phenomena and problems in different places and countries of the world we have to become knowledgeable about the economic, political, social, cultural and environmental context within which these take place and the importance of the nature of interactions between different parts of the world. Throughout the course, particular emphasis is placed on understanding and critically reflecting on a) contemporary population problems at the global, national and local scale, including the world population explosion, both dramatic decline and persistence of high levels of fertility in parts of the developing world, record-low fertility and population aging in highly industrialized countries, the HIV-AIDS epidemic and major health problems, environmental disasters and population health, increasing levels of international migration, refugee crises, massive rural to urban migrations in the less developed world; b) policies adopted to address these problems such as family planning policies to reduce fertility levels and immigration policies; and c) the gender dimension of contemporary population problems and policies. In addition, students will learn about basic sources, measures, and methods of representation used in the study of human population phenomena, and gain basic skills and experience in data analysis, interpretation, and writing research reports.

Geog 3521 Digital Planet: Understanding Your World in the Information Age
3 credit(s);Meets CLE req of Technology and Society
Instructor: Harvey,Francis
Description: The information age is with us in many guises. One of the key areas we experience its impact is in the increasing use of geospatial information technologies—everything from cell phone tracking and vehicle navigation to virtual globe mapping. These technologies are often implicit but key technologies in developing the information society. For a number of reasons, our location becomes a key factor in facilitating our interactions with others. As a starting point we can distinguish two sides to this. One of the most common geospatial information technologies, cell phones with GPS make it harder to get lost, but now the cell phone services are making also it harder to hide. How can we control access to this information? Indeed, the data used to help a cell phone customer figure out where they are can also be used by the government to find out where you have been. Justice department access to this data without probable cause has been an issue in many courts across the nation. The geospatial capabilities of cell phones and other information technologies puts us and society before many questions. What kind of control do we want over these technologies? What kind of control should we have? What kind of rights to privacy should apply to these technologies? What can we even do with these technologies? What are they? In this course, you will examine different types of these technologies and consider a range of applications as you learn about potentials, limits, and concerns about their use and ongoing developments. This course also takes up surveillance, cyberspace, and more common geospatial applications, especially those relying on cell phones.

Style: 10% Lecture, 30% Discussion, 40% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.

Grading: 50% written homework, 30% in-class presentation, 20% class participation. Grading follows qualitative criteria: - analysis and evaluation - argumentation and support - use of examples and facts - engagement with complexities - use of primary sources - use of secondary sources

Geog 3531 Numerical Spatial Analysis
4 credit(s); Credit will not be granted if credit has been received for: GEOG 5531;
Instructor: Swobodzinski, Martin
Description: Student may contact the instructor or department for information.

Geog 3561 Principles of Geographic Information Science
4 credit(s);
Instructor: Swobodzinski, Martin
Description: Student may contact the instructor or department for information.

Geog 3973 Geography of the Twin Cities
3 credit(s); Credit will not be granted if credit has been received for: GEO 1009; Meets CLE req of Social Sciences
Instructor: Pentel, Paula R
Description: This course is a survey of the historical and contemporary geographical patterns of the Twin Cities metropolitan area. Questions raised include: Where are things located? (industry, transportation, housing, people of diverse backgrounds and resources, retail trade and services) Why are they located as they are? What are things like at the neighborhood level and how have these changed over time? How do economic and demographic forces produce changes on the landscape? How do publicly sponsored planning and redevelopment programs try to correct the consequences of past actions? Class format is lecture and discussion. Questions are encouraged. Visual materials (power-point, overhead transparencies, slides, and occasional videos) will be used extensively. Course materials are the same for Geog 1973 and Geog 3973, but those registered in 3973 are expected to perform at a much higher level of analysis, and this will be reflected in the point scale for assignments. Two large field studies make up the bulk of the work and most of the readings are on E-reserve.
Style: 75% Lecture, 10% Film/Video, 10% Discussion, 5% Small Group Activities.
Grading: 15% mid exam, 25% final exam, 60% reports/papers.

Geog 3985W Senior Project Seminar
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: The goal of this course is for each student to take a geographical research idea and develop it into a polished senior project. Students will complete a series of assignments that build on one another and culminate in the final project. In class, students will critique samples of writing, present preliminary ideas and final projects, provide feedback to others, and undertake peer review. Students also will develop their ideas and make their writing more effective by meeting one-on-one with the instructor and with consultants at the Center for Writing.
Style: 20% Lecture, 60% Discussion, one-on-one consultation with instructor
Grading: 70% reports/papers, 10% special projects, 10% in-class presentation, 10% class participation.

Geog 4001 Modes of Geographic Inquiry
4 credit(s);
Instructor: Henderson, George Lawlor
Description: This is an exciting "ways of knowing" course, applicable to Geography but also to the social sciences, sciences, and humanities more generally. In the course we explore why the geographical interrelatedness of phenomena (e.g. places, people, social,
economic, and natural processes) means we need to understand those phenomena from an integrated perspective. We will see, however, that this is not enough: We need to understand that there are profoundly different ways of achieving integrated understandings and that every "integrated" understanding has its blind spots. To do this work we will focus on the topic of "Oil" as an especially important intersection of geography, geology, human history, politics, and more.

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 66% reports/papers, 33% quizzes. Attendance and class participation required: no extra points are given. Students may lose points, however, if attendance and participation are poor.

**Geog 5531 Numerical Spatial Analysis**
- 4 credit(s); Credit will not be granted if credit has been received for: GEOG 3531;
- **Instructor:** Swobodzinski, Martin
- **Description:** Student may contact the instructor or department for information.

**Geog 5561 Principles of Geographic Information Science**
- 4 credit(s);
- **Instructor:** Swobodzinski, Martin
- **Description:** Student may contact the instructor or department for information.

**Geog 5839 Introduction to Dendrochronology**
- 3 credit(s);
- **Instructor:** St. George, Scott
- **Description:** The annual growth rings from trees provide us with an incredibly powerful and adaptable tool to study Earth's history. Beyond just telling us a tree's age, tree rings also help us understand how our environment has changed in the past and how key processes in atmospheric, biological and geological systems operate over long timescales. This course will teach students the fundamental principles of dendrochronology through a combination of formal lectures, class discussion and laboratory exercises. Students will work in the Department of Geography's Center for Dendrochronology, where they will learn how to collect, prepare, date and interpret tree-ring specimens. By the end of the course, they will be able to explain the key concepts underlying dendrochronology and discuss how evidence from tree rings is used to address contemporary issues in natural history, resource management and climate science. Dendrochronology is much more than just counting tree rings. Join us to learn how to read the record of the rings.

**Geog 8001 Problems in Geographic Thought**
- A-F only, 3 credit(s);
- **Instructor:** Braun, Bruce Philip
- **Description:** Student may contact the instructor or department for information.

**Geog 8101 Proseminar: Nature and Society**
- 3 credit(s);
- **Instructor:** Neely, Abigail Helen
- **Description:** Student may contact the instructor or department for information.

**Geog 8211 Environmental Policy**
- 3 credit(s);
- **Instructor:** Squires, Roderick H
- **Description:** Student may contact the instructor or department for information.

**Geog 8280 Biogeography**
- 3 credit(s), max credits 9, 3 completions allowed;
- **Instructor:** St. George, Scott
- **Description:** Student may contact the instructor or department for information.

**Geog 8291 Seminar in GIS, Technology, and Society**
- 3 credit(s);
- **Instructor:** Matson, Jeffrey Karl
- **Description:** Student may contact the instructor or department for information.

**Geog 8405 Seminar: Graduate Student Professional Development**
- S-N only, 1 credit(s), max credits 2;
- **Instructor:** Henderson, George Lawlor
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Martin, Judith A
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Lindberg, Mark B
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Leitner, Helga
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Mc Master, Robert B
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Hart, John Fraser
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Samatar, Abdi Ismail
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Klink, Katherine
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Sheppard, Eric
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Squires, Roderick H
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Braun, Bruce Philip
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Gidwani, Vinay Krishin
Description: Student may contact the instructor or department for information.
Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: McMaster,Susanna Akiko
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Harvey,Francis
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Henderson,George Lawlor
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Manson,Steven M.
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Kipfmueller,Kurt
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Saldanha,Arun
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Martin,Judith A
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Lindberg,Mark B
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Leitner,Helga
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Mc Master,Robert B
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Hart,John Fraser
Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Samatar, Abdi Ismail
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Klink, Katherine
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Sheppard, Eric
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Squires, Roderick H
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: McMaster, Susanna Akiko
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Harvey, Francis
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Henderson, George Lawlor
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Manson, Steven M.
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Kipfmueller, Kurt
Description: Student may contact the instructor or department for information.
Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Saldanha, Arun
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Kayzar, Brenda
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Munoz, Lorena
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Swobodzinski, Martin
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Neely, Abigail Helen
Description: Student may contact the instructor or department for information.

Geological Engineering

GeoE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Guzina, Bojan B
Description: Student may contact the instructor or department for information.

GeoE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Guzina, Bojan B
Description: Student may contact the instructor or department for information.

GeoE 4102W Capstone Design
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Strack PhD, Otto D
Description: Student may contact the instructor or department for information.

GeoE 4301 Soil Mechanics II
A-F only, 3 credit(s); [3301 or CE 3301], upper div CSE or instr consent Credit will not be granted if credit has been received for: CE 4301;
Instructor: Gonella, Stefano
Description: Student may contact the instructor or department for information.

GeoE 8300 Seminar: Geomechanics
S-N only, 1-3 credit(s), max credits 4, 4 completions allowed; Credit will not be granted if credit has been received for: CE 8300;
Instructor: Gonella, Stefano
Description: Student may contact the instructor or department for information.

GeoE 8351 Advanced Groundwater Mechanics I
A-F only, 3 credit(s);
Instructor: Strack PhD, Otto D
Description: Student may contact the instructor or department for information.
Geriatrics 15-209 MouoT

Geri 7100 Oral Health Services for Older Adults Seminar
2 credit(s);
Instructor: Shuman, Stephen K
Description: Student may contact the instructor or department for information.

Geri 7200 Advanced Clinical Geriatric Dentistry
A-F only, 1-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Shuman, Stephen K
Description: Student may contact the instructor or department for information.

Geri 7210 Geriatric Hospital Dentistry
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Ofstehage, John Charles
Description: Student may contact the instructor or department for information.

German 320 Folwell Hall

Ger 222 Reading German
A-F only, 0 credit(s);
Instructor: Ruf, Helena Taura
Description: Teaches only a reading knowledge of German. Enables graduate students to satisfy departmental requirements for an advanced degree. Intensive reading of German scholarly texts. Emphasizes reading, grammar, some listening, discipline-specific vocabulary.

Ger 1001 Beginning German
5 credit(s);
Instructor: STAFF
Description: German 1001 is intended for beginners and introduces students to the four language skills areas: speaking, writing, listening, and reading. Homework assignments become the basis for student-to-student interaction, small group work and role-play in class. The text for the course, Wende, covers speaking and writing in daily contemporary issues and stresses reading and listening strategies useful in language learning. Along with this textbook we use a German cultural reader called Oktoberfest, a mystery which takes place in Munich, and grammar reference materials. Students will also complete a variety of writing activities, including essays. First-year language courses involve extensive student interaction, partner activities, and group work. Expect an average of 1.5 hours of outside preparation for each class session hour.
Style: mostly discussion and student involvement and interaction.
Grading: 10% final exam, 12% reports/papers, 4% special projects, 33% quizzes, 28% class participation, 13% other evaluation.
Exam Format: written.

Ger 1001 Beginning German
5 credit(s);
Instructor: Steinhagen, Virginia I
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for policies, including fee and financial aid restrictions. This course is designed to help you learn German through a proficiency-oriented process that presents practical information in real-life topics and scenarios. It will prepare you to communicate in the kinds of situations that are likely to arise when traveling in a German-speaking country. In each lesson you will complete learning activities and assessments in this course site and other online activities in the Wende Web site.
Style: Online
Grading: 12% final exam, 44% quizzes. Also: 56 practice exercises: 17%; 11 free writing assignments: 27%
Exam Format: Online

Ger 1002 Beginning German
5 credit(s);
Instructor: STAFF
Ger 1022 Beginning German Review

5 credit(s);
Instructor: STAFF

Description: Intended for students with previous experience in German, primarily those who have studied German in high school or at community colleges, or who are transfer students. The course involves intensive review of all four language modalities (listening, reading, speaking, writing), with a proficiency emphasis to prepare for German 1003. By the end of the course students should be able to compare the German and American educational systems, and describe free-time activities and career choices. They will also have become familiar with various contemporary social issues in the German-speaking countries. Several class sessions will help familiarize students with computer and Internet resources. This course includes process writing assignments. First-year language courses involve extensive student interaction, partner activities, and group work. Expect an average of 1.5 hours of outside preparation time for each class session hour.

Style: mostly discussion and student involvement and interaction.

Grading: 10% final exam, 12% reports/papers, 8% special projects, 27% quizzes, 22% class participation, 21% other evaluation.

Exam Format: written reading/group work assignments and computer/audio lab

Ger 1003 Intermediate German

5 credit(s);
Instructor: STAFF

Description: Students in this course will be working with the course-packet Sprunge and the accompanying listening exercises on Sprunge-Online, short literary texts, a feature film, and online cultural exercises. Topics covered in this course will include free-time activities and travel, living situations, the German educational system and career decisions. The program has a communicative and functional orientation. German 1003 is designed to review basic German language structures and to help students extend their listening and speaking skills. Regular recycling of grammar and vocabulary encourages students to become more fluent in their use of language. Students participate regularly in conversational activities, small group work, role-plays, and internet research of cultural topics. Process-writing essays, presentations on cultural topics, and short interviews round out the course. Partially Online Sections: The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Most weeks will have 3 face-to-face sessions and 2 online work-days, in addition to regular homework. This course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. To help assess whether online learning is right for you, see these guides at the Digital Campus website: http://digitalcampus.umn.edu/resources/onlinelearningassessment.html.

Style: varies with instructor

Grading: 10% final exam, 15% reports/papers, 6% special projects, 30% quizzes, 8% in-class presentation, 25% class participation, 6% other evaluation. Role-plays

Exam Format: written, oral interviews

Ger 1004 Intermediate German

5 credit(s);
Instructor: STAFF

Description: 1004 builds on the skills taught in 1003. Students work with the course-packet Sprunge 1004, read the book Sonnenallee, listen to podcasts, and watch a feature film. Topics include Berlin, film and art, family and youth, and issues of multiculturalism. The program has a communicative and functional orientation. German 1004 reviews German language structures and helps students expand their communicative skills. Regular recycling of grammar and vocabulary encourages students to become more fluent in their use of language. Students participate regularly in conversational activities, small group work and role-plays. Process-writing essays and interviews round out the course. Books: Sprunge 1004 Course Packet Brussig, Thomas. Am kurzeren Ende der Sonnenallee. Easy Reader version.

Style: varies with instructor

Grading: 10% final exam, 10% reports/papers, 15% quizzes, 15% additional semester exams, 29% class participation, 21% other evaluation. Other evaluation includes interviews, listening and reading exercises.

Exam Format: The exams and quizzes test vocabulary, grammar, reading or listening, and writing.

Ger 1022 Beginning German Review

5 credit(s);
Instructor: STAFF

Description: Intended for students with previous experience in German, primarily those who have studied German in high school or at community colleges, or who are transfer students. The course involves intensive review of all four language modalities (listening, reading, speaking, writing), with a proficiency emphasis to prepare for German 1003. By the end of the course students should be able to discuss familiar topics, such as every day activities, free-time occupations, or career choices, and have become familiar with some contemporary social issues in the German-speaking countries. There is a cultural reader for this course, Grenzverkehr. This course includes writing assignments that are process-oriented and require students to work together in editing groups. All class sessions involve extensive student interaction and require an average of 2 hours of outside preparation.

Style: student discussion and interaction
Ger 1909W Freshman Seminar: Sex, Politics & Comedy: Films of Ernst Lubitsch
A-F only, 3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Mc Cormick,Rick
Description: Sex, Politics, & Jewish Comedy: The Films of Ernst Lubitsch: From Berlin to Hollywood Ernst Lubitsch started out as an actor in short "Jewish" comedies in Berlin in the 1910s. By 1918 Lubitsch was directing big-budget comedies and historical epics; when he left for Hollywood in 1922, he was Germany's most successful director. In America he directed comedies and musicals. Even at their most escapist, his comedies were always about sex, class, and money, with sympathy for outsiders and the underdog. But in the 1930s, concerned about Nazi Germany, his American comedies became more overtly political, culminating with his anti-Nazi comedy, To Be or Not To Be (1942). We will study his comedies from both sides of the Atlantic: to what extent can they be explained in terms of his belonging to an oppressed minority in Germany? Through engaging in class discussion, small group work, class presentations, discussions in the forum on Moodle, and in writing one essay (min. 5pp.) and one take-home essay final (min. 5pp.), you will engage in critical evaluation of the films we will study. You will also examine how these films relate to the (trans-) cultural and historical contexts in which they arose: Lubitsch made his German films as a Jew in an anti-Semitic society; and he financed his last two films in Germany with American money; in Hollywood he made films set in a (mostly imaginary) Europe, and he was successful, but a lot of the money his films made was earned in Europe. And of course Lubitsch would become an enemy of Nazi Germany long before most Americans would (in 1935 that regime stripped him of his German citizenship for the "crime" of being Jewish).
Style: 20% Lecture, 40% Film/Video, 20% Discussion, 20% Small Group Activities.
Grading: 25% final exam, 25% reports/papers, 20% written homework, 20% attendance, 10% in-class presentation. Written homework=weekly Moodle responses; presentation is a group presentation
Exam Format: Take-home essay final (5 pp)

Ger 3011W Conversation and Composition
4 credit(s);Meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course is designed to refine students' oral and written expression and aid in the development of critical analysis skills. Contemporary readings introduce important communicative modes of language (description, narrative, debate, report, text analysis), while a grammar review supports works on finer grammar points. Multi-media materials (video clips, feature films, computer resources) will complement the other instructional materials. Graded work includes active class participation, essay writing and revision, individual and group oral presentations and projects, and informal writing assignments of varying lengths.
Style: 25% reports/papers, 25% quizzes, 10% journal, 25% in-class presentation, 10% class participation.
Grading: A-F only, 3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Exam Format: Written

Ger 3012W Conversation and Composition
3 credit(s);Meets CLE req of Writing Intensive
Instructor: Firchow,Evelyn S
Description: This course is the continuation of German 3011 and is the most advanced German language class. It is designed to refine students' oral and written expression. A thorough grammar review supports work on grammar points. Graded work includes active class participation, essay writing and revisions, grammar review and exercises, and informal writing assignments of varying lengths. Class attendance is required.
Grading: 60% written homework, 40% class participation. There will be no midterm or final examination.

Ger 3016 Techniques of Translation
3 credit(s);
Instructor: Firchow,Evelyn S
Description: Translation is an essential foreign language learning practice and key to the achievement of higher levels of linguistic proficiency and translingual competency. This course is designed as an introduction to the praxis of translation from German to English. Students will have the opportunity to increase their command of German through assignments designed to compare and contrast German and English grammar. You will engage in detailed textual analysis, expand your working vocabulary, and practice ways of analyzing complex syntax. Weekly assignments will encourage mastery of the structure of the German language, appreciation of semantic meanings, and development of advanced textual literacy. The texts that form the basis for our translation exercises will include a wide range of literary and non-fiction genre types written in standard German, including current articles from on-line news media (Die Zeit). As a final translation project, you will be responsible for preparing a well-crafted translation that shows your ability to handle the translation of stylistically complex German into English. This assignment requires a minimum of two drafts (preliminary and final) and will be approximately 10-15 pages (5000 words) in length. Objectives: In this course students will: * identify, define, and solve problems of translation from German to English and to German. * master the body of linguistic and cultural knowledge
and the mode of grammatical inquiry foundational to the successful translation of texts between these languages. * exercise effective communication skills in German and English in ways that lead to the development of critical literacy skills applicable in many contexts (academic and professional) and translilingual competence.

Ger 3104W Reading and Analysis of German Literature
3 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Melin, Charlotte Ann
Description: The Nature of Literature/The Literature of Nature. The connection between a sense of nature and cultural identity has a long and fascinating history in German-speaking countries, one that we can appreciate anew in an era of heightened environmental awareness. In this course (taught in German) we will read and discuss works that describe the mysteriousness of the European forest, the sublime beauty of the natural landscape, and the temptation of exploitable resources. A common theme in these texts is the recognition that knowledge and modern progress compel thoughtful reflection about our relationship to the natural world. We will critically examine this idea in light of concepts of sustainability, systems dynamics, and Umwelt. To explore the process of interpretive reading, we will alternate between recent works and historical texts, beginning with a readable contemporary satire by Kaminer about urban gardening, Mein Leben im Schrebergarten. Uraufst by Goethe and the meditation on the Chernobyl nuclear accident by Christa Wolf, Stoerfall: Nachrichten eines Tages, provide one such pairing. Other works (including the uncanny tale about a mine, Die Bergwerke zu Falun by E. T. A. Hoffmann, and the woodland crime story Die Judenbuche by Droste-Huelshoff) will help us chart shifting attitudes toward nature from Romanticism to today, concluding with a 2009 novella by Falkner about a rogue bear, Bruno. Multi-media materials and poetry will complement these selections and help exercise close-reading skills.
Style: 20% Lecture, 75% Discussion, 5% Demonstration.
Grading: 70% reports/papers, 15% class participation, 15% other evaluation.

Ger 3104W Reading and Analysis of German Literature
3 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Rothe, Matthias
Description: Bertolt Brecht's Twentieth Century Not only did Brecht write almost all forms of literature: poems, plays, short stories, aesthetic, political and philosophical essays, he also was a fan of boxing, fast cars and commercials. A communist and a notorious womanizer, he was a man of many friends and just as many enemies. "This beast has talents," as Thomas Mann remarked. Turning from an enthusiast supporter of First World War into a draft dodger, he was forced to flee fascist Germany to Scandinavia and the US, where he was subpoenaed by the House Un-American Activities Committee, returning only after the Second World War to work and live in East Germany. Brecht's life is intimately connected to the big movements, projects and catastrophes of modernity. A focus on Brecht's writings allows us to study literature in its breadth and furthermore to obtain insights into the various ways political and biographical events play into the production of literary texts.
Style: 30% Lecture, 5% Film/Video, 30% Discussion, 20% Small Group Activities, 15% Student Presentation. two film showings
Grading: 30% reports/papers, 15% special projects, 15% quizzes, 20% in-class presentation, 20% class participation.

Ger 3601 German Medieval Literature
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Wakefield, Ray M
Description: German 3601 is an introduction to medieval German literature in translation and is intended for any student with an interest in the European Middle Ages. We'll start with a deep look at medieval culture, focusing on the chronological distance from our own era. Our tour back through the time will confront us with such topic areas as: the role of women; the perception of space; the processes of thought; the function of memory; Germanic culture in its relation to feudal-Christian culture; and, of course, the Crusades. Once we have set our minds medievally, we will read a selection of literary works from the high Middle Ages in Germany. These works will include the Nibelungenlied, Tristan by Gottfried von Strassburg, Parzival by Wolfram von Eschenbach, a selection of courtly poetry, and the poems of Walter von der Vogelweide. Our final project will involve the reception of the Middle Ages in modern times. For this perspective, we will turn our attention to the Arthurian tradition, reading modern works of prose fiction and viewing films intended as popular entertainment.
Style: 30% Lecture, 40% Discussion. Group work
Grading: 30% mid exam, 30% class participation, 40% other evaluation. Final Written Project
Exam Format: Oral Response

Ger 3641 German Folklore
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Liberman, Anatoly
Description: Folklore is a broad area, including but not limited to tales, poems, songs, ritual drama, and dance. However, this course will be limited to the study of so-called verbal folklore of the German-speaking world, rather than folk music, dances, or material culture. It pursues two goals--to introduce students to beautiful and famous tales and, while doing so, to the world of oral culture, whose main features are similar all over the world. Our main reading will be the Grimms' tales. This collection will be supplemented by a book.
dealing with the most important characteristics of oral transmission. The main medium of the course is lectures, but they will alternate with discussion. There will be a takehome midterm, a takehome final (essay questions in both); also a paper, about five pages long will be required. The course spans the areas of literature, popular culture, and, to a smaller extent, mythology, religion, and cultural anthropology. No prerequisites.

**Style:** 80% Lecture, 20% Discussion.

**Grading:** 20% mid exam, 40% final exam, 40% reports/papers.

**Exam Format:** Essay

**Ger 3702 Beginning Middle High German**

3 credit(s);

**Instructor:** Hoptman, Ari E

**Description:** This course is an introduction to the language of Medieval Germany. We will be looking at prose and poetic texts from the period, as well as at the political and social history of the High Middle Ages. No prior knowledge of the Medieval language is required, but students should be well acquainted with the grammatical terminology of Modern German.

**Grading:** There will be quizzes, a midterm, a final, and a presentation. Participation, however, will count heavily.

**Ger 3993 Directed Studies**

1-4 credit(s), max credits 12, 12 completions allowed;

**Instructor:** STAFF

**Description:** Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

**Ger 4001 Beginning German**

2 credit(s);

**Instructor:** STAFF

**Description:** German 1001 is intended for beginners and introduces students to the four language skills areas: speaking, writing, listening, and reading. Homework assignments become the basis for student-to-student interaction, small group work and role-play in class. The text for the course, Wende, covers speaking and writing in daily contemporary issues and stresses reading and listening strategies useful in language learning. Along with this textbook we use a German cultural reader called Oktoberfest, a mystery which takes place in Munich, and grammar reference materials. Students will also complete a variety of writing activities, including essays. First-year language courses involve extensive student interaction, partner activities, and group work. Expect an average of 1.5 hours of outside preparation for each class session hour.

**Style:** mostly discussion and student involvement and interaction.

**Grading:** 10% final exam, 12% reports/papers, 4% special projects, 30% quizzes, 30% class participation, 14% other evaluation.

**Exam Format:** written.

**Ger 4002 Beginning German**

2 credit(s);

**Instructor:** STAFF

**Description:** German 1002 is intended for students who have completed German 1001 or the equivalent. The course emphasizes four language skills: speaking, writing, listening, and reading. Homework assignments become the basis for student-to-student interaction, small group work and role-play in class. The text for the course, Wende, covers speaking and writing in daily contemporary issues and stresses reading and listening strategies useful in language learning. Along with this textbook we use a German cultural reader called Grenzverkehr and grammar reference materials. By the end of the course students should be able to compare the German and American educational systems, and describe free-time activities and career choices. They will also have become familiar with various contemporary social issues in the German-speaking countries. Several class sessions will help familiarize students with computer and Internet resources. This course includes process writing assignments. First-year language courses involve extensive student interaction, partner activities, and group work. Expect an average of 1.5 hours of outside preparation time for each class session hour.

**Style:** Mostly discussion and student involvement and interaction.

**Grading:** 10% final exam, 12% reports/papers, 4% special projects, 30% quizzes, 30% class participation, 14% other evaluation.

**Exam Format:** written.

**Ger 4003 Intermediate German**

2 credit(s);

**Instructor:** STAFF

**Description:** Students in this course will be working with the course-packet Sprunge and the accompanying listening exercises on
Sprunge-Online, short literary texts, a feature film, and online cultural exercises. Topics covered in this course will include free-time activities and travel, living situations, the German educational system and career decisions. The program has a communicative and functional orientation. German 1003 is designed to review basic German language structures and to help students extend their listening and speaking skills. Regular recycling of grammar and vocabulary encourages students to become more fluent in their use of language. Students participate regularly in conversational activities, small group work, role-plays, and internet research of cultural topics. Process-writing essays, presentations on cultural topics, and short interviews round out the course. Partially Online Sections: The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Most weeks will have 3 face-to-face sessions and 2 online work-days, in addition to regular homework. This course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. To help assess whether online learning is right for you, see these guides at the Digital Campus website: http://digitalcampus.umn.edu/resources/onlinelearningassessment.html.

Ger 4004 Intermediate German

2 credit(s);
Instructor: STAFF
Description: 1004 builds on the skills taught in 1003. Students use the course-packet Sprunge 1004 and listening exercises on Sprunge-Online, read short texts and a play, watch a feature film, and do online cultural exercises. Topics include Berlin, film, and issues of multiculturalism. German 1004 reviews German language structures and helps students expand their listening, speaking, reading and writing skills. Regular recycling of grammar and vocabulary encourages students to become more fluent in their use of language. Students participate regularly in conversational activities, small group work, role-plays, and internet research. Process-writing essays, presentations, and interviews round out the course. Course materials: Sprunge 1004, Durrenmatt's Die Physiker. (Oxford UP edition).

Ger 5610 German Literature in Translation: Work of Translation: Theory, Function and Practice

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Allen, Joseph R
Description: This course is a review of the issues surrounding translation, including theories of representation, ideological work, as well as actual practice. The course is structured around a series of readings and discussion of both historical and contemporary writing on translation; these readings and discussions. While most of the readings center on the theory and particulars of literary translation, students will be encouraged to explore other manifestations of translation as a historical, cultural or aesthetic issue. Along with those interested in languages and literature, students in disciplines such as creative writing, performance, and the plastic arts are also welcomed. You should be native or near-native speaker of English, as well as an advanced speaker/reader of at least one other language, either classical or vernacular.

Ger 5711 History of the German Language I

3 credit(s);
Instructor: Liberman, Anatoly
Description: The recorded history of the German language is approximately twelve centuries long. Its sounds, grammatical forms, and syntax have changed radically over this period of time. We will be reading texts, the earliest of which goes back to the 9th century and the latest to the post-Reformation epoch. There will be assignments for every meeting. The excerpts from an anthology are relatively short. They will provide the students with a glimpse of older German poetry and prose, but the objective of the course is to introduce them to the development of the German language, rather than of German literature. Regular attendance is indispensable. There will be a takehome midterm and a takehome final. Lectures will alternate with discussion. This course is open to undergraduates and graduates, and one does not have to be a major to take it, but reading knowledge of German is required. The glossary in the anthology is in German, the lectures/discussions will be in English.
Style: 50% Lecture, 50% Discussion.
Grading: 30% mid exam, 40% final exam, 30% class participation.
Exam Format: Essay

Ger 5993 Directed Studies

1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

Ger 8300 Topics in Literature and Cultural Theory: Bodies

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Joeres, Ruth-Ellen B
Description: We have bodies; literary figures have bodies; ideas are embodied; we read and produce a "body" of texts. How are these bodies defined (constructed, constricted, represented, understood, ignored)? How are they made to carry meaning, or to resist it? What meaning? How do bodies matter to our thinking, to our reading, and to our understanding? Our seminar will explore these questions and others through a consideration of texts by Kafka, Fanon, Bernhard, Bordo, Schlink, Jelinek, Foucault, Kleist, Kristeva, Oezdamar, and Christa Wolf. This seminar is crosslisted with GSD 8001. Each seminar participant will complete a final written project appropriate for his/her level of progress in the graduate program.

Ger 8820 Seminar: Advanced Theory: Interrogating the Archive
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Maynes, Mary Jo
Description: Interrogating the Archive: Preserving and Interpreting Knowledges of the Past
This seminar is a Research Collaborative—an interdisciplinary collaboration between the Central European University in Budapest and the University of Minnesota on the broad theme of "Interrogating the Archive." The faculty involved are Mary Jo Maynes (History, UMTC), Leslie Morris (German, Scandinavian, and Dutch, UMTC), and Andrea Peto (Gender Studies, CEU.) The collaborative will introduce students to various emergent approaches to thinking about "the archive"—that is, in the broadest sense, records of the past - and to question how some knowledges about the past get preserved and some repressed. We will organize our syllabus around topics and interdisciplinary approaches of interest to students in a wide range of fields including history, public history and museum studies, Holocaust and genocide studies, literature and cultural studies, legal studies, gender studies, and film studies. We will introduce students to the general topic of "interrogating the archive;" we will introduce a few specific examples of archives so as to offer a common hands-on experience. The archives on which we will focus include written personal narratives (such as memoirs and letters), visual/oral interviews (especially the Visual History Archive), and political tribunal testimonies. These selections are based on types of inquiry that have been the focus of research projects for the three co-instructors; we will use these exemplary archives to address a wide range of cross-disciplinary questions that are applicable to many innovative approaches to the archive. However we also encourage students to pursue their own archive-related projects in the seminar. In addition, we will take advantage of our two geographic sites to investigate one additional approach to the archive -- namely, a comparative analysis of cities as "sites of history." We will look at how history has been concretized in our two cities (Minneapolis/St. Paul and Budapest) in comparison with literature on other select case-studies (such as Berlin, New York, Shanghai or Johannesburg). We will examine urban spaces, sites of historical commemoration and debates over them, and urban museums and public history projects. We will also look at the various types of migrations and diasporas that have brought people to and from these cities throughout history and how these diasporic histories are documented/archived/memorialized (or not). This seminar will involve simultaneous teaching on both sites. We will coordinate a seminar for graduate students on each of our campuses and connect our students with each other through video/internet technologies. We will invite students from the Research Collaborative seminar to submit papers based on their own interrogations of the archive for a research conference to be held at the University of Minnesota in Spring, 2013.
Style: 20% Lecture, 60% Discussion, 20% Student Presentation.
Grading: 30% reports/papers, 70% class participation. Class participation grade includes the short papers and the in-class presentation

Ger 8820 Seminar: Advanced Theory: History and Knowledge Making
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Shank, JB
Description: Modern thought begins out of a new awareness of temporality. Claims to truth and falsity seem to be unavoidably connected to the flux of contingent temporal change. Indicative of the temporal character of knowledge was the emergence of historicist conceptions of reason that made knowing an act determined through the contingencies of a finite temporal context. Modern thought from the Enlightenment to the present has developed through a continual negotiation with the ineradicable temporality of its content. Our seminar proposes to confront this entanglement through an inquiry into the methods and rationale of historicized knowledge making. This course will do a critical study of various approaches that take this entanglement as their point of departure and offer ways to come to terms with it. This course is taught in cooperation with Viadrina University in Germany. We will meet for four video conferences Fridays at 12:20 and have two intensive seminar phases at the beginning and at the end of the course with meetings in the evenings or on weekends. The German class will come over for 10 days in September; the American class will go to Germany for 10 days in early January 2013. Costs of flights will be covered, accommodation will be privately arranged.

Ger 8994 Directed Research
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Hueser, Rembert
Description: Student may contact the instructor or department for information.

German, Scandinavian, and Dutch 320 Folwell Hall

GSD 3451V Honors Major Project Seminar
A-F only, 3 credit(s); Honors student Credit will not be granted if credit has been received for: GSD 3451W; Meets CLE req of Writing Intensive
Instructor: Morris, Leslie C
Description: Style: 80% Discussion, 20% Small Group Activities. Students will meet in small groups on a regular basis to read drafts of each other's work.
Grading: 100% reports/papers. Although the final grade will be based on the paper, student participation is required during the process of reading and exchanging drafts.

GSD 3451W Major Project Seminar
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: GSD 3451V; Meets CLE req of Writing Intensive
Instructor: Morris, Leslie C
Description: Style: 80% Discussion, 20% Small Group Activities. Students will meet in small groups on a regular basis to read drafts of each other's work.
Grading: 100% reports/papers. Although the final grade will be based on the paper, student participation is required during the process of reading and exchanging drafts.

GSD 3511W Vikings, Knights, and Reformers: German and European Culture and Controversies to 1700
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Wakefield, Ray M
Description: This course, with lectures in English, offers an overview of the cultural, political, and social development of the German-speaking countries, the Dutch-speaking countries, and the Nordic countries from the early Middle Ages until 1700. Emphasis will be placed on the way in which these countries view their medieval and early modern pasts, and the roles of the Middle Ages, the Reformation, and the Thirty Years War in the creation of national identities. Topics to be discussed include myths about the origins of Germanic and Finnish peoples, their roles in the development of medieval Christianity, the social position of women in medieval and early modern times, medieval and early modern court culture, Reformation and Counter-reformation debates. Discussions will involve many types of cultural artifacts, e.g., literary, historical, religious, philosophical texts; paintings, manuscript illuminations, architecture; medieval music. Some discussions will involve film excerpts to introduce the reception of medieval cultures in modernity. Texts include early alliterative verse, the master narrative of the dragon-slayer, medieval mystics, reformation treatises, and early modern prose. Discussions in English; additional work in primary languages for GSD majors and minors.

GSD 5103 Teaching of Germanic Languages
3 credit(s);
Instructor: Melin, Charlotte Ann
Description: This seminar is designed primarily for first-time graduate TAs who will be teaching in the modern language departments. The course, which is conducted in English, draws on research, examples, and case studies relevant to classroom teaching in the second language areas of participants. Its goal is to equip new instructors with practical and theoretical knowledge about language teaching. Instructors are encouraged to develop self-reflexive practices and to create teaching materials. Discussions cover such topics as the following: theories of language acquisition, the role of contextualization, approaches to help learners develop language proficiency (in reading, writing, listening, and speaking skills), cultural competence, technology resources, assessment practices, educational outcomes, and current discussions in the U.S. and internationally about the importance of second language education.
Style: 10% Lecture, 90% Discussion.

GSD 8001 Approaches to Textual Analysis
3 credit(s);
Instructor: Joeres, Ruth-Ellen B
Description: We have bodies; literary figures have bodies; ideas are embodied; we read and produce a "body" of texts. How are these bodies defined (constructed, constricted, represented, understood, ignored)? How are they made to carry meaning, or to resist it? What meaning? How do bodies matter to our thinking, to our reading, and to our understanding? Our seminar will explore these questions and others through a consideration of texts by Kafka, Fanon, Bernhard, Bordo, Schlink, Jelinek, Foucault, Kleist, Kristeva, Oezdamar, and Christa Wolf. This seminar is crosslisted with GER 8300. Each seminar participant will complete a final written project appropriate for his/her level of progress in the graduate program.

GSD 8801 Dissertation Seminar
S-N only, 3 credit(s);
Instructor: Joeres, Ruth-Ellen B
Description: Student may contact the instructor or department for information.
Gerontology

Gero 5100 Topics in Gerontology: Aging Policy Seminar
2 credit(s), max credits 10, 10 completions allowed;
Instructor: Ratner, Edward
Description: The Aging Policy Seminar is a new, 2-credit Gerontology topics course offered Fall semester of 2012. Students will explore and develop insights into a variety of policy issues involving older people. This seminar is offered as part of the Hearst Scholarship Program in Aging. The topics for exploration in this course will be chosen to match students' interests. Potential issues may include Medicare and Medicaid, Social Security, policies about long-term care, preventive care for older people, employment discrimination, ethical topics like end-of-life or basic risk-taking. Each student will lead a seminar on the topic of their choice and write a follow-up paper.
Style: 5% Lecture, 95% Discussion. This is a seminar where students will be active participants. It is an opportunity to develop insights in a topic of interest.
Grading: 75% reports/papers, 25% in-class presentation. Grades will be based on articulation in class and in each stage of project work. Grade will be based primarily on the quality of the final paper (due December 19) and presentation. Higher levels of performance will be expected from group projects.

Gero 5101 Milestones in the Biology of Aging
1 credit(s);
Instructor: Ferrington, Deborah Ann
Description: This course is intended to provide a platform of understanding about the major issues surrounding biological research in aging. The course will utilize original literature, including both seminal, historical background papers and the most recent progress, in the field of biogerontology research as a starting point for in-depth discussions. This course is directed to graduate students and post-doctoral fellows currently engaged in conducting research in the area of biological aging. This course is open to graduate students and post-doctoral fellows involved in the National Institutes on Aging (NIA) training grant ?Functional Proteomics of Aging?. This course is also open to other graduate students who are conducting biological research in aging with instructor's permission. The goal of the course is to provide the students with a historical perspective and essential understanding of the contemporary issues in biogerontology. The overall objectives include: a. To be able to select an appropriate animal model for experimentation. b. Identify the leaders in the field of biogerontology and their contributions. c. Identify historical milestones in the field of biogerontology. d. Discuss how the student's research integrates into the field of biogerontology. e. Demonstrate awareness of the most recent progress in the field of biogerontology research. Following the completion of this course the students will be able to specifically: a. List and describe the animal models available to investigate aging b. Explain how genetics and environment factors influence the aging process c. Explain the relationship between telomere dysfunction, senescence, and aging. d. Discuss the theories of aging with emphasis on the theory of oxidative stress e. Discuss the pros and cons of inflammation and its relationship to the aging process. f. Identify and describe the key cellular signaling pathways that influence longevity g. List and describe the multiple interventions, including caloric restriction, resveratrol, and the Interventions Testing Program that may extend longevity. h. Compare and contrast healthspan versus lifespan.
Style: 25% Lecture, 25% Discussion, 25% Small Group Activities, 25% Student Presentation. Class is very interactive, consisting of brief presentations about the readings by either instructors or students, followed by student-led discussion of the topic.
Grading: 30% reports/papers, 55% written homework, 15% attendance.
Exam Format: There are no exams, just short answers for questions about the reading assignments. The questions are designed to help focus the topic.

Gero 5105 Multidisciplinary Perspectives on Aging
3 credit(s);
Instructor: STAFF
Description: This course will provide an overview of aging, with a specific focus on issues of older adults in America. The course will focus on various theoretical approaches to aging services and trace the evolution of public policies and legislation affecting older adults, family caregivers and aging services providers. The course will also focus on contemporary approaches and recommendations to help older adults live not just longer but better lives. In particular, we will discuss policies and services affecting community living, retirement, housing, aging and healthcare, recreation, long-term care, cultural differences and health disparities, financial and economic issues, and end of life care. Throughout the course, interdisciplinary perspectives will be emphasized, as contemporary services are moving toward a multi-disciplinary environment. The course will draw on the expertise of a wide variety of faculty and researchers at the university, as well as older adults, family members, professionals and policymakers in the community.
Style: 80% Lecture, 20% Discussion.

Gero 5115 Introduction to Geriatrics
S-N only, 2 credit(s);
Instructor: STAFF
Global Studies 214 Social Science

GloS 1112 Globalization and Social Justice
A-F only, 3 credit(s);
Instructor: Skaria,Ajay
Description: What does globalization involve? It involves constantly changing flows of 'possessions', 'ideas' and 'humans and non-humans' in time and space. It also involves social arrangements such as nation-states, the UN, the World Trade Organization, the World Bank, the International Monetary Fund, and various non-governmental organizations and social movements that attempt to manage these flows. What are these flows? The flow of 'possessions' includes commodities, stocks & bonds, currencies, foreign investments, remittances, and technologies (including biogenetic and weapons technologies). Correspondingly, the flow of 'ideas' includes democracy, human rights, free market as well as fair trade doctrines, religious ideologies, and cultural forms (including music, arts, and TV/cinema). Finally, flows of humans and non-humans include human migrations, tourism, animal and plant movements, water, diseases and epidemics, greenhouse gases and toxic and non-toxic waste. These flows have dissimilar patterns and unequal impacts on people around the world. Attempts to manage them are also unequal. This implies that in addition to the question 'What does globalization involve?' we need to ask a second and equally important question - 'What is the justice of globalization?'. Using carefully selected readings and audio-visual media this course will tackle both questions in order to think the possibility of a better, more just world.
Style: 60% Lecture. 40% Discussion and Audio-visual media (film and documentary clips, audio clips).
Grading: 10% class participation. 40% short commentaries on course materials, 40% individual 2,500 word essay, 10% group presentation.
Exam Format: There are no exams.
GloS 1905 Freshman Seminar: Medieval Mediterranean Piracy  
A-F only, 3 credit(s);  
Instructor: Reyerson,Kathryn L  
Description: Student may contact the instructor or department for information.

GloS 1905 Freshman Seminar: Global Politics of Eating  
A-F only, 3 credit(s);  
Instructor: Schurman,Rachel  
Description: Hamburgers and Coke, rice and beans, cafe latte, farmed salmon... How and where are these foods produced and consumed, and how has this been shaped by history, politics, and economic power? This course is built on two premises: first, the production, distribution, and consumption of food involve power relationships among different groups of people, and second, one can gain great insights into these relationships through a sociological analysis of food. Among the topics we will explore are: why some people are 'stuffed' while others starve (to borrow a title from Raj Patel's recent book); how we came to eat the way we do; transnational food chains; the Gates Foundation and the new "Green Revolution for Africa"; controversies over GMOs; and fair trade coffee. We will read engaging books and blogs, watch interesting films, and eat together at an ethnic restaurant. Students will also carry out various small group exercises, visit a farmer's market, learn where your food comes from, and engage in debates about the sustainability and future of the global food system.  
Style: 20% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 10% Student Presentation, 5% Field Trips, 5% Guest Speakers. This class will be largely discussion based and will require active participation and intellectual engagement.  
Grading: 20% final exam, 20% reports/papers, 15% special projects, 10% attendance, 10% reflection paper, 5% in-class presentation, 10% class participation, 10% other evaluation. Grading system subject to change, based on the semester and interest of the class.  
Exam Format: Final exam will be a written, take-home essay.

GloS 3144 Knowledge, Power, and the Politics of Representation in Global Studies  
4 credit(s); 6 cr in social sciences including [GEOG 1301 or HIST 1012 or HIST 1015 or HIST 1018 or HIST 1019 or POL 1025], global studies major Credit will not be granted if credit has been received for: GLOS 3144H;  
Instructor: Namakkal,Jessica L  
Description: Student may contact the instructor or department for information.

GloS 3144H Honors: Knowledge, Power, and the Politics of Representation in Global Studies  
A-F only, 4 credit(s); 6 cr in social sciences including [GEOG 1301 or HIST 1012 or HIST 1015 or HIST 1018 or HIST 1019 or POL 1025], honors global studies major Credit will not be granted if credit has been received for: GLOS 3144;  
Instructor: Viestenz,William R  
Description: Student may contact the instructor or department for information.

GloS 3219 History of Capitalism: Uneven Development Since 1500  
3 credit(s);  
Instructor: Isett,Christopher Mills  
Description: This course traces the origins and development of capitalism from the sixteenth century English countryside to contemporary China. We examine how social and political institutions and relations configure in different places and in different ways the economic and market behavior of social classes, how goods are produced, the social division of labor (who produces what and for whom), and long-term economic outcomes. The course examines these issues in a variety of socio-political and national contexts, taking examples from Asia, Europe, and the Atlantic World (Europe, America and East Africa) to study the different forms taken by agricultural production (peasants, capitalist farmers, slave-based commodity production) and manufacturing (household handicrafts, industrial capitalism, and slave-based manufacturing). The course will also examine different approaches to the study of the origins of capitalism proposed by the classical economists (Smith, Malthus,, and Marx) as well as contemporary neo-classical and Marxist theories of how the modern world economy came about. The course does not require an understanding of economic principles or language, and is accessible to those who have had no exposure to economics.

GloS 3302 Debating "Development": Contested Visions  
A-F only, 3 credit(s);  
Instructor: Gidwani,Vinay Krishin
**Description:** Our primary objectives in this undergraduate seminar will be to take stock of the astonishingly versatile concept of 'development' and critically probe its workings across a range of geopolitical and historical settings. We will ask: What is 'development' and why has it come to saturate common sense as an indispensable given of our modern existence (so much so that we measure the success or failure of our life trajectories via terms like "career development")? How should we account for the power of 'development' in the lives of rich and poor nations, and rich and poor people? More profoundly, we will ask whether 'development' is complicit in reinforcing categories such as 'rich' and 'poor' / 'developed' and 'backward' / or 'civilized' and 'uncivilized'? Finally, we will examine whether emerging economic powers such as China and India, who are now large donors of development aid in Africa and Latin America, imagine 'development' in the same manner as their western counterparts. In terms of content, the course will cover, both, the classic literature on development as well the latest writings on it. Class format will be a combination of lectures and discussions.

**Style:** 60% Lecture, 20% Discussion. 10% End-of-term Research Presentations by students, and 10% Engagement with audio-visual materials (primarily film and documentary clips).

**Grading:** 30% mid exam. 35% Final Research paper; 15% Group in-class presentation; 10% Commentary on articles; 10% Class attendance and participation.

**Exam Format:** Midterm exam is combination of multiple choice, short answers and a long essay based on lectures and assigned readings.

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**GloS 3401 International Human Rights Law**

A-F only, 3 credit(s);
Instructor: Frey, Barbara A

**Description:** International Human Rights Law is designed to introduce students to issues, procedures, and advocacy strategies involved in the promotion and protection of human rights worldwide. The class encourages students to analyze case situations, to assess relevant laws, and to evaluate the most effective methods to prevent human rights violations. Because of the evolving nature of the laws and issues in this field, students are encouraged to think critically about the ideas and practices related to human rights protection. The instructor, Barbara Frey, is a lawyer and human rights activist.

**Style:** 50% Lecture, 25% Discussion. Guest speaker, debates and other exercises

**Grading:** 25% mid exam, 40% final exam, 25% reports/papers, 10% class participation.

**Exam Format:** Short answer and essay

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**GloS 3402 Human Rights Internship**

A-F only, 3 credit(s);
Instructor: Johnson, Douglas A

**Description:** Student may contact the instructor or department for information.

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**GloS 3422 20th-Century Europe From the End of World War II to the End of the Cold War: 1945-91**

3 credit(s); Credit will not be granted if credit has been received for: HIST 3722;
Instructor: Wolfe, Thomas C

**Description:** Global Studies 3422 is an introduction to the social, economic, political, and cultural changes that have unfolded in Europe after World War II. We shall examine a variety of sources, including TV shows, films, newspapers, and short stories, in order to come to a better understanding of Europe's recent past. The course will explore how the heritage of catastrophic wars of the first part of the 20th century has had lasting effect on everything from the shaping of political consensus to the growth of the European Union. We shall also focus on the difficulties experienced by Europeans during the course of the Cold War, including Europe's division into two camps, and the problems that have appeared after 1989, especially that of creating a continent-wide European identity. No special linguistic abilities are required, although they are most welcome.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 25% mid exam, 40% final exam, 15% reports/papers, 10% quizzes, 10% class participation.

**Exam Format:** Multiple choice and essay

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**GloS 3550V Honors Course: Supervised Research Paper**

A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Craddock, Susan L

**Description:** Student may contact the instructor or department for information.

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**GloS 3643 Islam and the West**

3 credit(s); Credit will not be granted if credit has been received for: CAS 3533;
Instructor: Bashiri, Iraj

**Description:** Intellectual trends defining fundamental differences between Islam and the West arise from their respective historical, philosophical, and intellectual mindsets. The course examines contributing factors to tension, anxiety, and hatred between Muslims and the West, as well as aspects of Islamic and European cultures that inspire respect and emulation. Objectives: - Acquaint the students with the fundamental differences between Islam and Western culture. - Equip students with the means for a better
understanding of international events. - Teach students to distinguish different trends and accept them for what they are. - Discuss factors that create tension, anxiety and hatred among peoples and nations. - Examine aspects of Islamic and European cultures that inspire respect and emulation.

**Style:** 50% Lecture, 20% Film/Video, 10% Discussion, 20% Student Presentation.

**Grading:** 12% final exam, 27% reports/papers, 36% quizzes, 3% attendance, 12% in-class presentation, 10% other evaluation. Book Report

**Exam Format:** Essay

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**GloS 3701W Population in an Interacting World**

4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing intensive

**Instructor:** Taylor, Marvin Paul

**Description:** The aim of this course is to provide students with a multi-disciplinary understanding of and appreciation for human population phenomena and problems in different parts of the world and at different geographic scales?from the local to the global. This involves an investigation of the different components of population change - fertility, mortality and migration of human populations - and an engagement with different, often competing, explanations of these population phenomena that have been offered by social scientists. One of the major learning objectives is to create an awareness that in order to understand and explain population phenomena and problems in different places and countries of the world we have to become knowledgeable about the economic, political, social, cultural and environmental context within which these take place and the importance of the nature of interactions between different parts of the world. Throughout the course, particular emphasis is placed on understanding and critically reflecting on a) contemporary population problems at the global, national and local scale, including the world population explosion, both dramatic decline and persistence of high levels of fertility in parts of the developing world, record-low fertility and population aging in highly industrialized countries, the HIV-AIDS epidemic and major health problems, environmental disasters and population health, increasing levels of international migration, refugee crises, massive rural to urban migrations in the less developed world; b) policies adopted to address these problems such as family planning policies to reduce fertility levels and immigration policies; and c) the gender dimension of contemporary population problems and policies. In addition, students will learn about basic sources, measures, and methods of representation used in the study of human population phenomena, and gain basic skills and experience in data analysis, interpretation, and writing research reports.

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**GloS 3900A Topics in Global Studies: Novels and Nations**

3 credit(s), max credits 15, 3 completions allowed;

**Instructor:** Kaminsky, Amy K

**Description:** Virginia Woolf described fiction as a spider's web, "attached ever so lightly perhaps, but still attached to life at all four corners." If the web is pulled from its moorings it collapses into a sticky mass, yet to look only to the places and ways it attaches to the wall of reality is to miss the complexity of the web itself. This class teaches students to explore and enjoy the intricacies of the web of fiction without losing sight of the structures that hold it up. Among the questions we ask are: What is the relation between the nation and the literature produced within it? How do emerging nations enlist literature in their claims for nationhood? How does the institution of literature underpin Empire? How does gender, as an organizing principle of identity, inflect literary representations of the nation? We will examine these and other questions in relation to narrative fiction. The course is also designed to familiarize students with the conventions and inner workings of literary texts. A major goal of the course is to give interdisciplinary students in Global Studies, much of whose curriculum leans toward the empirical and theoretical world of the social sciences, the tools to understand the pleasure of reading, the ways a literary text works, and its privileged position as an apparatus of representation.

**Style:** 35% Lecture, 50% Discussion, 15% Small Group Activities.

**Grading:** 55% reports/papers, 40% reflection paper, 5% class participation. The term "reflection papers" here refers to the 10 responses to the readings, worth 4% each.

**Exam Format:** No exams

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**GloS 3900C Topics in Global Studies: Modern South Asian Literature**

3 credit(s), max credits 15, 3 completions allowed;

**Instructor:** Sawhney, Simona

**Description:** The contemporary Hindi writer Uday Prakash has written a strange and haunting story about the first British Governor General of India, Warren Hastings (1732-1818) titled "Warren Hastings and His Bull." Presenting Hastings as an embodiment of the contradictory passions of colonial rule, Prakash evokes a fascinating picture of globalization in the eighteenth century. Beginning with that story, we will read a series of works by modern writers who have engaged with the political and emotional confusions of postcolonial life in South Asia. We will read about kings who write mournful poetry instead of marching to war, about women who eat obsessively to ward off despair, and destitute men who squander on liquor the money they should have spent on a relative's funeral. Through these stories?and the films, historical accounts, and critical analyses that accompany them?we will learn about some of the partitions, political struggles, and intellectual debates that have marked modern South Asia. This course fulfills the Writing Intensive requirement. All readings in English.

**Style:** 50% Lecture, 50% Discussion.
GloS 3900 Topics in Global Studies: Gender and Global Politics  
3 credit(s), max credits 15, 3 completions allowed;  
Instructor: Bashore, Katie L  
Description: Student may contact the instructor or department for information.

GloS 3900 Topics in Global Studies  
3 credit(s), max credits 15, 3 completions allowed;  
Instructor: Wolbert, Barbara  
Description: Investigating in particular the significance of photographs in coping with migration, this course touches upon a central feature of photography--its ability to make present the absent. Rather than as recipients of images produced by mass media we look at immigrants as producers of images: Our point of departure is the socially extremely effective but often-underestimated individual image production. We will focus on private photographs, on photos taken, owned and circulated by migrants. These photographs, which may or may not depict immigrants, refugees or displaced persons open insights into immigrants' lives on multiple levels. Beyond the study of the narratives of those who are in the photo and of those, who took it and who hold on to it, the study of practices of collecting, framing, and displaying of photographs allows us to better understand processes of identification. By comparing earlier photograph collections of migrant families to more recent snapshots - analogue and digital - as well as to migrants - video, internet, and mobile phone practices, we will explore immigrants' changing sense of place and their migratory concepts. We will hence discuss legacies of first generations of immigrants and constructions of neighborhoods, real and virtual. In a second step we juxtapose these visual practices with visual representations of migration in the press and other mass media, using them as a key to public discourses on migration, shaping immigration policies and integration politics.  
Style: 40% Lecture, 5% Film/Video, 40% Discussion, 10% Student Presentation, 5% Field Trips.  
Grading: 55% reports/papers, 10% quizzes, 15% in-class presentation, 20% class participation. Journal for Extra-Credit

GloS 3930 Topics in Latin American Studies: Latin American Cultural Discourse: The Short Story  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Ginzburg, Jaime  
Description: Student may contact the instructor or department for information.

GloS 3961 Culture and Society of India  
3 credit(s); Credit will not be granted if credit has been received for: ANTH 3023; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences  
Instructor: Raheja, Gloria Goodwin  
Description: Student may contact the instructor or department for information.

GloS 3981W Major Project Seminar  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Detournay, Diane Angela  
Description: Student may contact the instructor or department for information.

GloS 3981W Major Project Seminar  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Craddock, Susan L  
Description: Student may contact the instructor or department for information.

GloS 3993 Directed Study  
1-5 credit(s), max credits 12, 12 completions allowed;  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.

GloS 4311 Race, Class, and the Politics of Nature  
A-F only, 3 credit(s);  
Instructor: Goldman, Michael R  
Description: This course focuses on some of the world's most perplexing ecological/social problems, helping students to understand them from a sociological perspective that emphasizes the significance of class and race in the making of these problems. We take a close look at compelling case studies, such as the creation of a nuclear landscape in the U.S. Southwest; the colonization of the Amazon rainforest; the production of types of nature at U.S. theme parks and African nature reserves; and the global transformation of food production. We also explore the roles of scientists, NGOs, regulatory agencies, private firms, and social movements in the Brazilian Amazon, Tanzania, the U.S., India, and Laos, in order to help us understand how such problems are created and potentially
GloS 4344 Europe and its Margins

**A-F only, 3 credit(s);**

**Instructor:** McLean, Stuart J

**Description:** This course seeks to shed light upon the constitution of the mythical, yet world-historically significant entity called "Europe" by focusing, less on present-day political boundaries than on regions and landscapes--forests, mountains, marshes, islands--that have been thought of at various times as marking Europe's inner and outer cultural and geographical limits. In charting the shifting imaginaries of such marginal spaces, it aims to engage too with the production of cultural and historical knowledge and the formation (and occasionally the subversion) of identity-claims. Readings draw upon a variety of historical, literary and ethnographic sources, with a view to exploring the interplay between physical geography, imagination and cultural memory, along with the forms of literary and scholarly writing developed in and in relation to marginal lands. The course concludes by relating these themes to the reconfigured political geography of post-socialism and European integration.

**Style:**
60% Lecture, 5% Film/Video, 25% Discussion, 5% Small Group Activities, 3% Student Presentation, 2% Guest Speakers.

**Grading:**
75% reports/papers, 10% special projects, 5% in-class presentation, 10% class participation.

GloS 4910 Topics in Global Studies: Transnational Activism

**3 credit(s), max credits 9, 3 completions allowed;**

**Instructor:** Aminzade, Ron R

**Description:** Focusing on the origins, dynamics, and consequences of transnational activism, this course explores the opportunities and challenges facing transnational activists, connections between local and global activism, and the role of transnational activism in bringing about change. The course is organized around theoretical issues concerning how people become recruited and committed to transnational collective action, how they develop cosmopolitan identities, and how states, non-governmental organizations, and international institutions shape opportunities for transnational activism. We will also explore how people acquire the capacity to organize across nation-state borders, the strategies and tactics they use, and the long-term and short-run impact of transnational activism. These issues will be addressed through various empirical case studies, which focus on environmentalism, human rights, labor, immigration, and opposition to militarism and neo-liberal capitalism. The emphasis will be on applying concepts and theories to help us understand the transnational activist network or movement selected for your research paper.

**Style:**
20% Lecture, 30% Discussion, 30% Small Group Activities, 20% Student Presentation.

**Grading:**
75% reports/papers, 25% quizzes. To receive an A or A- for the course, students must attend all classes and complete all assignments, including all in-class exercises and three moodle website submissions. The five pop quizzes will cover the material in the required readings.

GloS 4910 Topics in Global Studies: Social Change & the Global City

**3 credit(s), max credits 9, 3 completions allowed;**

**Instructor:** Goldman, Michael R

**Description:** SOCIAL CHANGE IN THE GLOBAL CITY In the spring of 2007, someone moved to the city. That move marked the tipping point of a new urban century in which more than half of the world's population now lives in cities, mostly in the global South, e.g., Guangzhou (China), Johannesburg (South Africa), Surat (India). In 2011, we observed another important urban event: cities exploded in social protest, from the Arab Spring revolutions in Cairo, Tunis, and Manama, to the Occupy Wall Street movements crisscrossing London, Madrid, Athens, and New York City. Has the era of urban revolution and transformation begun? Is living in these cosmopolitan zones reflective of a new type of freedom, democracy, lifestyle, and opportunity? How can we reconcile these hopeful images of the global city with the sobering reality that the vast majority lives in poverty, without fair access to basic goods and rights, such as clean water, living wages, and social justice? We will pursue these questions in depth through excellent readings, films, paper writing, debates, small research projects, and lots of virtual travel. We will visit a range of cities -- Shanghai, Bangalore, Mumbai, Johannesburg, Rio, Buenos Aires, and even Minneapolis -- experiencing them from street level and from above, to gain a robust understanding of this new era of urban cultures, politics, and globalization.

**Style:**
50% Lecture, 5% Film/Video, 25% Discussion, 15% Small Group Activities, 3% Student Presentation, 2% Guest Speakers.

**Grading:**
75% reports/papers, 10% special projects, 5% in-class presentation, 10% class participation.

GloS 5403 Human Rights Advocacy

**3 credit(s);**

**Instructor:** Frey, Barbara A

**Description:** This 3-credit seminar will study the histories, philosophies, and activities of human rights activists and organizations. The course examines the theoretical basis of the human rights movement, the principles underlying key organizations in the human rights field as well as their strategies, tactics, and programs. The course provides an opportunity to put in perspective students' previous experiences as interns or staff with non-governmental organizations (NGOs) in the human rights field. The course will use case studies and other participatory methods to understand and to evaluate the work of human rights activists. We will learn about tactical methods including fact-finding and documentation of violations, normative campaigns, the use of social networking, and discuss the
effectiveness and consequences of each method. The class will consider critiques of human rights practice including cultural relativism and the asymmetries of power that affect relationships among human rights advocates. Students will consider the basic organizational structure and fundraising needs of NGOs. Students will design and present a research project based on their selection of in-class topics. Readings include material on the history of NGOs; roots and development of the human rights movement; analysis of key NGOs; advocacy within international institutions; and reports and publications from NGOs working in the field.

Style: 15% Lecture, 75% Discussion. 10% Group Work

Grading: 20% reports/papers, 20% class participation. 30% oral presentation; 30% group project

GloS 5900 Topics in Global Studies: Marco Polo in Theoretical & Historical Context
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Noakes,Susan J
Description: French 8120 Topics in Later French Medieval Literature Fall 2012 The Marvels of the World: the Global Middle Ages, I. N.B. Taught in English this year. Note: This course is the first semester of the year-long Winton Seminar. The second semester, to be taught in Spring 2013, will treat different but related material. Students may enroll for both semesters or only one. Participation in the second semester is not contingent on participation in the first. During the Fall, the course will be co-taught by Winton Professor Geraldine Heng (Dept. of English, Univ. of Texas-Austin) along with Professor Noakes. "Marvels of the World" translates into English the French title of Marco Polo's famous account of his travels in the East (originally written in French). The seminar's focus will be the Asias (Central, South, East, etc.) during the period ca. 500-ca. 1500 C.E. Readings will be supplemented by discussions with eight visitors from off campus, specialists in the various parts of Asia during the period in question.

Style: 20% Lecture, 60% Discussion, 15% Student Presentation, 5% Guest Speakers.

Grading: 60% reports/papers, 10% in-class presentation, 30% class participation.

GloS 5900 Topics in Global Studies: Black Women Writers in the Diaspora
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Githire,Njeri R
Description: This upper lever undergraduate/graduate seminar explores the dynamics of black women's expressivity in literary texts from Africa through the Americas to Europe and beyond. Selected writers include Ama Ata Aidoo, Toni Morrison, Edwidge Danticat, Maryse Conde, Jamaica Kincaid, and Calixthe Beyala. This course will examine the intersections of colonialism/slavery and racism, classism, and sexism and explore the connections between gender, space, place, and power/empowerment. It will examine representation of the body and self-image in women's narratives, and identify how acts of resistance inform women's writing.

GloS 5900 Topics in Global Studies
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Wolbert,Barbara
Description: Student may contact the instructor or department for information.

GloS 5900 Topics in Global Studies: Marco Polo in Theoretical & Historical Context
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Heng,Geraldine Guan Noi
Description: French 8120 Topics in Later French Medieval Literature Fall 2012 The Marvels of the World: the Global Middle Ages, I. N.B. Taught in English this year. Note: This course is the first semester of the year-long Winton Seminar. The second semester, to be taught in Spring 2013, will treat different but related material. Students may enroll for both semesters or only one. Participation in the second semester is not contingent on participation in the first. During the Fall, the course will be co-taught by Winton Professor Geraldine Heng (Dept. of English, Univ. of Texas-Austin) along with Professor Noakes. "Marvels of the World" translates into English the French title of Marco Polo's famous account of his travels in the East (originally written in French). The seminar's focus will be the Asias (Central, South, East, etc.) during the period ca. 500-ca. 1500 C.E. Readings will be supplemented by discussions with eight visitors from off campus, specialists in the various parts of Asia during the period in question.

Style: 20% Lecture, 60% Discussion, 15% Student Presentation, 5% Guest Speakers.

Grading: 60% reports/papers, 10% in-class presentation, 30% class participation.

GloS 5993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

GloS 5994 Directed Research
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.
Grad 5102 Preparation for University Teaching for Nonnative English Speakers

S-N only, 2 credit(s);
Instructor: Beers, Barbara Lee

Description:

Grad 5105 Practicum in University Teaching for Nonnative English Speakers

S-N only, 2 credit(s);
Instructor: Meyers, Colleen Marie

Description:

Grad 5105 Practicum in University Teaching for Nonnative English Speakers

S-N only, 2 credit(s);
Instructor: Martin, Kate

Description: GRAD 5105 is designed to develop the skills and knowledge to teach effectively in a foreign language and in a cultural context with different expectations about learning, pedagogy, and roles of students and instructors. This course fulfills the University of Minnesota policy, English Proficiency for Nonnative English Speaking Teaching Assistants which is required for nonnative English speaking TAs whose English Language Proficiency rating is 2 or 3. As a practicum course, GRAD 5105 focuses on applying language and teaching skills in an authentic classroom situation. The course emphasizes analysis and deep understanding of cross-cultural issues that may arise while teaching at the University of Minnesota. In addition to improving their spoken academic English, students in this course will observe experienced TAs, read and discuss research on teaching in their discipline, reflect on their own teaching practice. (Prerequisite: English Language Proficiency rating of 1, 2, or 3.)

Style: 10% Lecture, 10% Film/Video, 40% Discussion, 20% Laboratory, 20% Small Group Activities. The laboratory refers to the weekly PRC component which takes place in a computer language lab.

Grad 5105 Practicum in University Teaching for Nonnative English Speakers

S-N only, 2 credit(s);
Instructor: Jetter, Mary

Description:

Grad 8101 Teaching in Higher Education

OPT No Aud, 3 credit(s);
Instructor: Wingert, Deborah Ann

Description:
Grad 8101 Teaching in Higher Education
OPT No Aud, 3 credit(s);
Instructor: Alexander, Ilene Dawn
Description: GRAD 8101 is designed to help graduate students and post-doctoral fellows become responsive and reflective teachers. Co-teachers along with course participants will model a variety of active learning strategies and will facilitate discussions addressing educational theory and practice. By combining action and analysis, participants will explore and develop teaching skills that promote learning within a diverse student body across a variety of settings.

Grad 8200 Teaching and Learning Topics in Higher Education
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Rozaitis, Bill
Description: This course will provide you an opportunity to expand your skills as a learning-centered instructor. Using a case study approach, you and your classmates will work through four Episodes that feature characters who are facing professional and personal challenges very similar to those faced by graduate instructors at the University of Minnesota. Topics include syllabus design, grading, dealing with difficult student situations, and writing a teaching philosophy. NOTE: This course meets entirely online; workload is 45 hours for the semester.

GDes 1311 Foundations: Drawing and Design in Two and Three Dimensions
A-F only, 4 credit(s);
Instructor: STAFF
Description: In this course the formal, perceptual, symbolic and technical aspects of visual communication will be introduced—with the emphasis on drawing. Design elements and principles will be applied within the context of observational drawing, as well as two- and three dimensional design. Design process and creative problem solving will be stressed. We will work in a variety of mediums -- charcoal, conte, white chalk, but the emphasis will be on gaining expertise with the pencil. Subject matter will range from the figure to two-dimensional abstraction projects. You will gain expertise in drawing technique, as well as in composition, visual unity and balance and in visual analysis of drawings.
Style: 20% Lecture, 20% Discussion. 60% studio work
Grading: 10% class participation, 90% other evaluation. visual assignments
Exam Format: Final presentation

GDes 1312 Foundations: Color and Design in Two and Three Dimensions
A-F only, 4 credit(s);
Instructor: STAFF
Description: "This design foundations course introduces students to color theory and its application in two and three dimensional design through lectures, demonstrations, extensive studio work and critiques. Emphasis is on developing students' ability to use color effectively in two and three dimensional design applications by studying traditional design elements, gestalt grouping principles, theories of color organization, color and spatial perception, and color interaction." But it is so much more. Intended for (pre) majors in graphic design, clothing design, interior design, and housing; this class has a well-earned reputation as 'the toughest class you'll ever love.' Class time is spent with slide and lecture presentations, studio work, and group and individual critiques. Successful completion requires a significant commitment to time, energy, and resources (supplies run approximately $200.) The result: You will produce a portfolio that is a descriptive explanation and illustration of color and design theory, enhanced with your own creative projects: a physical product of impressive proportions. You will be proud of your work. Most importantly, you will see the world in a whole new light. You'll see color where you didn't see it before and recognize the 'color magic' around you.
Style: 20% Lecture. critique; 60% studio work
Grading: 20% reports/papers, 80% other evaluation. studio designs and exercises

GDes 1315 Foundations: The Graphic Studio
A-F only, 4 credit(s);
Instructor: STAFF
Description: This class will provide an overview of the design communication process including creative procedure, terminology, and technology, and will introduce the use of current computer applications. Students will gain skills in digital illustration and page layouts, and image-scanning and manipulation. Graphic design elements of typography, production, color separation, printing process, and photography will also be addressed.
Style: 50% Lecture, 10% Discussion, 40% Laboratory.
Grading: 25% class participation, 50% problem solving, 25% other evaluation. in-class exercises

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Hokanson, Brad
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Martinson, Barbara Elizabeth
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Waldron, Carol C
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Chu, Sauman
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Boyd Brent, James W
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

GDes 2342 Web Design
A-F only, 3 credit(s);
Instructor: Fritchie, Louise Lystig
Description: Student may contact the instructor or department for information.

GDes 2342 Web Design
A-F only, 3 credit(s);
Instructor: Adamson, Ben
Description: Student may contact the instructor or department for information.

GDes 2342 Web Design
A-F only, 3 credit(s);
Instructor: Carton, Anthony O
Description: Student may contact the instructor or department for information.

GDes 2345 Typography
A-F only, 4 credit(s);
Instructor: STAFF
Description: Typographic Design is an introduction to the art of visual communication: the visual realization of a most basic element of communication--the word. The history of typographic forms, principles of composition, and the expressive potential of type will be
explored through reading, research, exercises, and design production. Sequential studies will follow the design process: problem-solving through exploration, experimentation, selection, critique, and refinement. Effectiveness of typographic design will be evaluated in terms of legibility, readability, and expression: the direct correlation to gestalt design principles will be evident. Assignments include textbook readings, research from additional sources, analysis and critique of found design, and, primarily, studio design production. Studio assignments will involve both handwork, to train the eye and hand; and digital typographic design and illustration using QuarkXpress and Illustrator. Class sessions will be held in both classrooms and Macintosh studios. This class is for Graphic Design majors who have passed portfolio review only.

**Style:** 10% Lecture; studio; 30% critique

**Grading:** 100% other evaluation. studio design projects including process participation

### GDes 2350 Design Material Topics: Making Images: Drawing and Illustration in Design
- **A-F only, 3 credit(s), max credits 8;**
- **Instructor:** Owens, John Lee
- **Description:** Student may contact the instructor or department for information.

### GDes 2350 Design Material Topics: Making Images: Drawing and Illustration in Design
- **A-F only, 3 credit(s), max credits 8;**
- **Instructor:** Cosper, James Louis
- **Description:** Student may contact the instructor or department for information.

### GDes 2399W Design and its Discontents: Design, Society, Economy and Culture
- **A-F only, 3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Jasper, Daniel
- **Description:** Student may contact the instructor or department for information.

### GDes 3312 Color and Form in Surface Design
- **A-F only, 4 credit(s);**
- **Instructor:** Carlson, Anna M
- **Description:** Description: This course will explore use of color, pattern, and visual imagery in surface design with a variety of methods; relief printing, screen-printing on paper and alternative surfaces, fabric dyeing and printing.
- **Style:** 5% Lecture, 10% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Demonstration, 5% Field Trips, 60% Studio.
- **Grading:** 90% special projects, 10% class participation.

### GDes 3312 Color and Form in Surface Design
- **A-F only, 4 credit(s);**
- **Instructor:** Newby, Alex Jane Hawxwell
- **Description:** Student may contact the instructor or department for information.

### GDes 3351 Text and Image
- **A-F only, 3 credit(s);**
- **Instructor:** McCarthy, Steven J
- **Description:** Student may contact the instructor or department for information.

### GDes 3351 Text and Image
- **A-F only, 3 credit(s);**
- **Instructor:** Jasper, Daniel
- **Description:** Student may contact the instructor or department for information.

### GDes 3352 Identity and Symbols
- **A-F only, 3 credit(s);**
- **Instructor:** Chu, Sauman
- **Description:** This course will build on previously learned graphic design principles including a continued investigation of typography and its application. Students will explore the representation of abstract ideas in the form of symbols for the purpose of building identity. The class will focus on the development of visual identity through a systems approach to design with application to various printed collateral. This course will prepare students to design a symbol, a logotype, stationary system, and collateral products, keeping the identity consistent and intact throughout the process. Students will apply gestalt design principles, figure-ground relationships, and contrast within the structure of the grid to aid organization from piece to piece and within the whole.
Style: 20% Lecture, 30% Discussion, 10% Student Presentation, 40% Studio.
Grading: 85% special projects, 5% written homework, 5% journal, 5% class participation.

GDes 3353 Packaging and Display
A-F only, 3 credit(s);
Instructor: Pickman, Gregory Hunter
Description: Student may contact the instructor or department for information.

GDes 4131W History of Graphic Design
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Martinson, Barbara Elizabeth
Description: This course is an overview of the history of visual communication with an emphasis on graphic design. We will explore the history of images and writing systems and develop a better understanding of human communication systems. What can we learn about history and different cultures through the letterforms and symbols that they used? How has visual communication contributed to the formation of the knowledge-base of cultural groups? How do the formal qualities of these communications depict the values and zeitgeist of a time period? Using both primary and secondary sources we will explore these questions. The course format includes faculty and student led lecture and discussion sessions, writing and design work, and a few videos and games. Weekly small group sessions provide an active venue for exploring the ideas covered in lecture. Assignments include one group paper (2 pages), two individual papers (5 pages each), the design of a digital exhibition, and the design of a timeline. Midterm and final exams are included.
Style: 40% Lecture, 5% Film/Video, 30% Discussion, 10% Small Group Activities, 15% Student Presentation.
Grading: 10% mid exam, 10% final exam, 25% reports/papers, 40% special projects, 15% in-class presentation.
Exam Format: short answer, multiple choice, fill in blank, crossword puzzle, who am I? questions.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Hokanson, Brad
Description: Student may contact the instructor or department for information.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Martinson, Barbara Elizabeth
Description: Student may contact the instructor or department for information.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Waldron, Carol C
Description: Student may contact the instructor or department for information.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Chu, Sauman
Description: Student may contact the instructor or department for information.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Boyd Brent, James W
Description: Student may contact the instructor or department for information.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

GDes 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.
GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Hokanson, Brad
   Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Martinson, Barbara Elizabeth
   Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Waldron, Carol C
   Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Chu, Sauman
   Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Boyd Brent, James W
   Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: McCarthy, Steven J
   Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Jasper, Daniel
   Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
   S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196 Credit will not be granted if credit has been received for: ADES 4196;
   Instructor: Hokanson, Brad
   Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
   S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196 Credit will not be granted if credit has been received for: ADES 4196;
   Instructor: Martinson, Barbara Elizabeth
   Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
   S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196 Credit will not be granted if credit has been received for: ADES 4196;
   Instructor: Waldron, Carol C
   Description: Student may contact the instructor or department for information.
GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Chu, Sauman
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Boyd, Brent, James W
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196Credit will not be granted if credit has been received for: ADES 4196;
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

GDes 4345 Advanced Typography
A-F only, 4 credit(s);
Instructor: Waldron, Carol C
Description: Advanced Typographic Design is the continued -- and deeper -- exploration of the expressive visual communication through letterforms and words. Both the fundamental legibility of the invisible art and overt expression through type will be addressed. Students will apply fundamentals of design and typography to simple and complex communication objectives, exploring the expressive potential of varied typographic treatments through contrast, manipulation, arrangement, and juxtaposition. There will be a brief foray into the design of letterforms. Various typographic movements will be studied from both formal and historic perspectives. An extended typographic project will be completed. This class is intended for advanced graphic design majors.
Style: 10% Discussion, studio design projects and critique
Grading: 100% other evaluation. studio design project and performance

GDes 4345 Advanced Typography
A-F only, 4 credit(s);
Instructor: Nelson, Ryan G.E.
Description: Student may contact the instructor or department for information.

GDes 4350 Advanced Design Material Topics: Print Product Production
A-F only, 3 credit(s), max credits 8;
Instructor: Waldron, Carol C
Description: Student may contact the instructor or department for information.

GDes 4351 Design Process: Photography
A-F only, 3 credit(s);
Instructor: McCluske, Marit
Description: Student may contact the instructor or department for information.
GDes 4354 Graphic Design IV: Integrative Campaign  
A-F only, 4 credit(s);  
Instructor: STAFF  
Description: This course will focus on a multi-faceted designed communication campaign involving substantial investigation and conceptual application. The project undertaken will be, in large part, developed by the individual student as a result of his/her research and specific interests. The multi-faceted character of the project will support a unified theme/concept/idea for an identified client that is aimed effectively at a specific market or interest group. The completed project will demonstrate the student's ability to maximally apply acquired knowledge, skill and understanding of design, including a high degree of thought and sophisticated creativity. The course will build on typographic, compositional and imaging skills that students have developed in earlier classes.  
Style: 30% Lecture, 30% Discussion. studio time  
Grading: 25% class participation, 75% other evaluation. design project

GDes 4355 Graphic Design Portfolio  
S-N only, 3 credit(s);  
Instructor: Pickman, Gregory Hunter  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Hokanson, Brad  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Martinson, Barbara Elizabeth  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Waldron, Carol C  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Chu, Sauman  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Boyd Brent, James W  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: McCarthy, Steven J  
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Jasper, Daniel  
Description: Student may contact the instructor or department for information.

GDes 5341 Interactive Design  
A-F only, 3 credit(s); [2334 or 2342], design minor or graphic design major or grad student or instr consent credit will not be granted if credit already received for: 5341Credit will not be granted if credit has been received for: DHA 4384;  
Instructor: Trice, Frances  
Description: Student may contact the instructor or department for information.
GDes 5342 Web and Interface Design  
**A-F only, 3 credit(s);**  
**Instructor:** Fritchie,Louise Lystig  
**Description:** Student may contact the instructor or department for information.

GDes 5386 Fundamentals of Game Design  
**A-F only, 3 credit(s);**  
**Instructor:** Chu,Sauman  
**Description:** This course focuses on understanding games in all kinds of format: paper-based strategy games, electronic game, classic board game, etc. This course examines the theoretical and practical aspects of making games. Focuses will be placed on its designing rules, strategies, methodologies, and organizational structures, and the design process from the ground up. Further analysis and evaluate the elements that makes a game successful and how they function will be included. In addition, investigation on understanding design, interactivity, player's choice, action, and outcome, rule-making and rule-breaking, the social interaction, the story telling, the emotion that games invoke, and the meaning and ideology will be included. Other topics such as signs and cultural meaning, and visual representation will also be discussed.  
**Style:** 30% Lecture, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 30% Studio.  
**Grading:** 75% special projects, 5% journal, 10% reflection paper, 10% in-class presentation.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Hokanson,Brad  
**Description:** Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Martinson,Barbara Elizabeth  
**Description:** Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Waldron,Carol C  
**Description:** Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Chu,Sauman  
**Description:** Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Boyd Brent,James W  
**Description:** Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** McCarthy,Steven J  
**Description:** Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Jasper,Daniel  
**Description:** Student may contact the instructor or department for information.

GDes 8193 Directed Study  
**A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;**  
**Instructor:** Hokanson,Brad  
**Description:** Student may contact the instructor or department for information.
GDes 8193 Directed Study
  A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
  Instructor: Martinson, Barbara Elizabeth
  Description: Student may contact the instructor or department for information.

GDes 8193 Directed Study
  A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
  Instructor: Waldron, Carol C
  Description: Student may contact the instructor or department for information.

GDes 8193 Directed Study
  A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
  Instructor: Chu, Sauman
  Description: Student may contact the instructor or department for information.

GDes 8193 Directed Study
  A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
  Instructor: Boyd Brent, James W
  Description: Student may contact the instructor or department for information.

GDes 8193 Directed Study
  A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
  Instructor: McCarthy, Steven J
  Description: Student may contact the instructor or department for information.

GDes 8193 Directed Study
  A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
  Instructor: Jasper, Daniel
  Description: Student may contact the instructor or department for information.

GDes 8222 Plan B Master's Project
  S-N only, 3 credit(s);
  Instructor: Hokanson, Brad
  Description: Student may contact the instructor or department for information.

GDes 8222 Plan B Master's Project
  S-N only, 3 credit(s);
  Instructor: Martinson, Barbara Elizabeth
  Description: Student may contact the instructor or department for information.

GDes 8222 Plan B Master's Project
  S-N only, 3 credit(s);
  Instructor: Waldron, Carol C
  Description: Student may contact the instructor or department for information.

GDes 8222 Plan B Master's Project
  S-N only, 3 credit(s);
  Instructor: Boyd Brent, James W
  Description: Student may contact the instructor or department for information.

GDes 8222 Plan B Master's Project
  S-N only, 3 credit(s);
GDes 8222 Plan B Master’s Project
S-N only, 3 credit(s);
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

GDes 8990 MFA Creative Thesis
A-F only, 6 credit(s), max credits 12;
Instructor: Hokanson, Brad
Description: Student may contact the instructor or department for information.

GDes 8990 MFA Creative Thesis
A-F only, 6 credit(s), max credits 12;
Instructor: Waldron, Carol C
Description: Student may contact the instructor or department for information.

GDes 8990 MFA Creative Thesis
A-F only, 6 credit(s), max credits 12;
Instructor: Chu, Sauman
Description: Student may contact the instructor or department for information.

GDes 8990 MFA Creative Thesis
A-F only, 6 credit(s), max credits 12;
Instructor: Boyd Brent, James W
Description: Student may contact the instructor or department for information.

GDes 8990 MFA Creative Thesis
A-F only, 6 credit(s), max credits 12;
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

GDes 8990 MFA Creative Thesis
A-F only, 6 credit(s), max credits 12;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

Greek 245 Nicholson Hall

Grk 1001 Beginning Classical Greek I
5 credit(s);
Instructor: STAFF
Description: Poetry, history, religion, medicine, philosophy, drama, political science, biology, literary criticism, astronomy, rhetoric, mythology, geography... Whether you want to read Homer or Hippocrates, Aristotle or Aristophanes, Paul or Plato, Greek 1001-1002 is the place to start. In this class you will learn the elements of classical Attic Greek, the dialect spoken and written in Athens during the fifth and fourth centuries BC: a language of tragedy, comedy, oratory, history, and philosophy. With a knowledge of the basic grammar and vocabulary of Attic, you can later go on to read the epics of Homer, the letters of Paul, the comedies of Aristophanes, or whatever you'd like from texts spanning 1200 years of history. There are no prerequisites for this course, except for an interest in the ancient world.
Style: 50% Lecture. recitation
Exam Format: translation, grammatical analysis
Grk 3003 Intermediate Greek Prose
4 credit(s); Grade of at least [C- or S] in [1002 or 5001] or instr consent credit will not be granted if credit already received for:
Grk 3113 Credit will not be granted if credit has been received for: GRK 5003;
Instructor: STAFF
Description: An introduction to reading unadapted Greek prose from classical authors such as Plato, Lysias, and Xenophon. The course includes some grammar review but also considers literary issues and situates the works we study in their historical context.
Exam Format: translation/comment

Grk 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Sheets, George A
Description: Student may contact the instructor or department for information.

Grk 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

Grk 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Olson, S Douglas
Description: Student may contact the instructor or department for information.

Grk 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Smith, Stephen
Description: Student may contact the instructor or department for information.

Grk 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Gallia, Andrew B
Description: Student may contact the instructor or department for information.

Grk 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Cole, Spencer E
Description: Student may contact the instructor or department for information.

Grk 4951W Major Project
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Sellew, Philip
Description: Student may contact the instructor or department for information.

Grk 5003 Intermediate Greek Prose: Graduate Student Enrollment
3 credit(s); Grade of at least [C- or S] in [1002 or 5001] or [instr consent, grad student] credit will not be granted if credit already received for: Grk 3113 Credit will not be granted if credit has been received for: GRK 3003;
Instructor: Olson, S Douglas
Description: Student may contact the instructor or department for information.

Grk 5200 Biblical Greek
3 credit(s), max credits 6;
Instructor: Sellew, Philip
Description: This course involves readings from the Gospels, epistles of Paul, and the Book of Revelation. A main emphasis is
helping students gain confidence in reading the Greek New Testament. Depending on student interest we may sample similar Koine texts such as the Septuagint, Apostolic Fathers, or Josephus.

Style: 10% Lecture, 80% Discussion, 10% Student Presentation.

Grading: 15% mid exam, 15% final exam, 10% reports/papers, 15% quizzes, 5% in-class presentation, 40% class participation. The weekly quizzes focus on vocabulary review.

Exam Format: Translation of passages.

Grk 5800 Sight Reading for Graduate Students
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Krevans,Nita
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Sheets,George A
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Krevans,Nita
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Olson,S Douglas
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Sellew,Philip
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Smith,Stephen
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Gallia,Andrew B
Description: Student may contact the instructor or department for information.

Grk 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Cole,Spencer E
Description: Student may contact the instructor or department for information.

Grk 8200 Readings in Greek Verse: Euripides
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Sellew,Philip
Description: Close reading and discussion of plays by Euripides. We will read the Bacchae and the Hippolytus and perhaps the Ion. Special interest in questions of characterization and the presentation of religious themes.

Style: 10% Lecture, 70% Discussion, 20% Student Presentation.

Grading: 30% mid exam, 20% reports/papers, 10% in-class presentation, 40% class participation.

Grk 8910 Seminar: Papyrology
3 credit(s), max credits 30, 10 completions allowed;
Instructor: Perale,Marco
Health Informatics  777 Mayo (Mayo Mail Code 511)

HInf 5430 Health Informatics I
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Pieczkiewicz PhD, David Sean
Description: An introductory survey of health informatics, focusing on foundational concepts. Topics covered include: conceptualizations of data, information, and knowledge; current terminologies, coding, and classification systems for medical information; systems analysis, process and data modeling; human-computer interaction and data visualization. Lectures, readings, and exercises will highlight the intersections of these topics with electronic medical record systems and other health information technology.

HInf 5436 Seminar
S-N only, 1 credit(s);
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 5496 Internship in Health Informatics
S-N only, 1-6 credit(s), max credits 18, 3 completions allowed;
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 5499 Capstone Project for the Masters of Health Informatics
A-F only, 3 credit(s);
Instructor: Gatewood PhD, Lael Cranmer
Description: Student may contact the instructor or department for information.

HInf 5501 US Health Care System: Information Challenges in Clinical Care
S-N only, 0-1 credit(s), max credits 1, 1 completion allowed;
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 5510 Applied Health Care Databases: Database Principles and Data Evaluation
A-F only, 3 credit(s);
Instructor: Pieczkiewicz PhD, David Sean
Description: Principles of database theory, modeling, design, and manipulation of databases will be introduced, taught with a healthcare applications emphasis. Students will gain experience using a relational database management system (RDBMS), and database manipulation will be explored using Structured Query Language (SQL) to compose and execute queries. Students will be able to critically evaluate database query methods and results, and understand their implications for health care.

HInf 8405 Advanced Topics in Health Informatics I
3 credit(s);
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 8446 Professional Studies in Health Informatics
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Khairat PhD, Saif
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Connelly, Donald P
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: LaVenture, Marty
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Westra,Bonnie L
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Adam,Terrence Joseph
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Pakhomov,Serguei V
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Ellis, Lynda B
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Faughnan MD, John Gordon
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Pieczkiewicz PhD, David Sean
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Finkelstein, Stanley M
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gatewood PhD, Lael Cranmer
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Chute, Christopher G
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Parente, Stephen T
Description: Student may contact the instructor or department for information.
HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Khairat PhD,Saif
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Raman,Sivakumaran
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Delaney,Connie White
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Sainfort,Francois
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Jacko,Julie A
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Johnson,Layne Mark
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Yasnoff,William A.
   Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Rudrapatna,Venkatesh K
   Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Connelly,Donald P
   Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: LaVenture,Marty
   Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Westra,Bonnie L.
   Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
   A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
   Instructor: Adam,Terrence Joseph
HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Pakhomov, Serguei V
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Ellis, Lynda B
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Faughnan MD, John Gordon
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Pieczkiewicz PhD, David Sean
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Finkelstein, Stanley M
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gatewood PhD, Lael Cranmer
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Chute, Christopher G
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Parente, Stephen T
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Khairat PhD, Saif
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Raman, Sivakumaran
Description: Student may contact the instructor or department for information.
HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Delaney, Connie White
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Sainfort, Francois
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Jacko, Julie A
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Johnson, Layne Mark
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Yasnoff, William A.
Description: Student may contact the instructor or department for information.

HInf 8494 Research in Health Informatics
A-F only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Rudrapatna, Venkatesh K
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Connelly, Donald P
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: LaVenture, Marty
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Westra, Bonnie L.
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Adam, Terrence Joseph
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Pakhomov, Serguei V
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Ellis, Lynda B
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Faughnan MD, John Gordon
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Pieczkiewicz PhD, David Sean
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Finkelstein, Stanley M
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Gatewood PhD, Lael Cranmer
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Chute, Christopher G
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Parente, Stephen T
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Khairat PhD, Saif
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Raman, Sivakumaran
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Delaney, Connie White
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Sainfort, Francois
Description: Student may contact the instructor or department for information.
HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Jacko, Julie A
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Johnson, Layne Mark
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Yasnoff, William A.
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
A-F only, 4 credit(s);
Instructor: Rudrapatna, Venkatesh K
Description: Student may contact the instructor or department for information.

Health Professions

HP 3021 Patient Care Techniques
A-F only, 1 credit(s);
Instructor: King, Vanessa Lea
Description: Student may contact the instructor or department for information.

Health Systems Management

HSM 3521 Health Care Delivery Systems
A-F only, 3 credit(s);
Instructor: Riley, William J
Description: Students explore health care delivery systems including a review of health economics, third party and public reimbursement, and contemporary trends in health care organizations, management and administration. Regulations, standards, quality assurance, accreditation and ethical issues are considered in the context of contemporary medical practice. Future implications for the health care providers and professionals, patients and families, communities, and international health are included in this course.

HSM 4541 Health Care Finance
A-F only, 3 credit(s);
Instructor: Riley, William J
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policy, fee, and financial aid information. This course is designed to provide an understanding of finance in the health care industry through a discussion of how the health care industry’s financial information is interpreted and used. The course aims to make the language of health care finance understandable and relevant for students in health care professions and in administration programs.
Style: 100% Web Based.
Grading: 10% mid exam, 15% final exam. Group: -2 spreadsheet assignments (10%) -3 case studies (15%) Individual: -Self-introduction (2%) -5 discussions (20%) -4 spreadsheet assignments and Excel exercise (10%) -12 sets of study questions (18%)

HSM 4561 Health Care Administration and Management
A-F only, 3 credit(s);
Instructor: Henry, William Floyd
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. This course introduces managing as a process in health care organizations. Its focus is on "managing" (a verb) rather than "management" (a noun), because I believe management is an active process, not a static state. Moreover, in complex organizations, such as health care delivery systems, managing doesn’t just involve "the managers"; it is carried out by everyone in the organization. So this course is really about management in, rather than of, health care organizations. In this course, you’ll acquire knowledge and skills in the organizational and managerial aspects of health care. We
will apply behavioral and organizational theory and management principles to health care settings. These principles will include organizational models, supervision, employee evaluation, problem solving, productivity management, and group leadership.

**Style:** 100% Web Based.

**Grading:** -3 group papers: 30 pts. -3 group exercises: 50 pts. -3 group cases: 60 pts. -1 self-introduction: 8 pts. -6 topic of interest responses: 24 pts. -12 quizzes: 48 pts. -group participation: 20 pts. -2 papers: 30 pts. -1 final paper: 30 pts.

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**Hebrew** 245 Nicholson Hall

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**Hebr 1001 Beginning Hebrew I**

5 credit(s); Credit will not be granted if credit has been received for: HEBR 4001;

**Instructor:** Schneller, Renana Segal

**Description:** Modern Israeli Hebrew seeks to serve several kinds of students. Typically, students in this course present a wide variety of backgrounds and interests, which include Jewish, or Israeli cultural studies, archaeology, linguistics, travel or work in Israel, and biblical studies. This is a course for complete beginners. You will learn basic listening, speaking, reading and writing skills with stress on proficiency in communication. Cultural materials are incorporated. The course serves as a good base for subsequent work in biblical Hebrew. The difference between this course and Hebr 1104, Biblical Hebrew, is that this course has a spoken, conversation component and prepares students to read texts without the diacritic marks. (This reading skill is necessary for those interested in reading Hebrew journal articles and post-biblical Hebrew commentaries.) The pronunciation of Hebrew taught will be the same in both courses.

**Style:** 50% Lecture, 50% Discussion. audio/video tapes, games, activities

**Grading:** 20% mid exam, 25% final exam, 20% reports/papers, 25% quizzes, 10% class participation.

**Exam Format:** multiple choice and essay

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**Hebr 3011 Intermediate Hebrew I**

5 credit(s); Grade of at least [C- or S] in [1002 or 4002] or instr consent Credit will not be granted if credit has been received for: HEBR 4011;

**Instructor:** Schneller, Renana Segal

**Description:** This course assumes Hebr 1001-2 or other equivalent language study. It leads to the satisfaction of the CLA Language Requirement in: 1) listening comprehension, 2) speaking, 3) reading, 4) writing. The course materials and activities are designed to help students gain the skills necessary in each of these areas. We recognize that you may well have forgotten some of the skills acquired and the "rust" will have to be removed. There is a rapid review of fundamentals followed by a selection of dialogues designed to serve as a bridge between 1st and 2nd year Hebrew. Simple selections from Modern Israeli prose, newspaper, and the arts from the transition to written Israeli Hebrew. T.V. news and films are added as your ability increases. Grammatical skills and writing will be honed through short compositions and a textbook manual. Text: "Hebrew from Scratch" part II

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 20% mid exam, 25% final exam, 20% reports/papers, 25% quizzes, 10% class participation.

**Exam Format:** written and oral responses

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**Hebr 3101 Intermediate Biblical Hebrew I**

4 credit(s);

**Instructor:** Jassen, Alex P

**Description:** This course offers a review and nuancing of key concepts of biblical Hebrew grammar in the context of readings of a wide range of texts from the Hebrew Bible. Attention will be paid to mastering skills for reading different genres of biblical Hebrew texts (e.g., narrative, poetry, legal texts, wisdom texts). Students will read the original text using a critical edition of the Hebrew Bible. The following textbook is used as an aid to train students in advanced reading of biblical texts: E. Ben Zvi, M. Hancock, and R. Beinert, Readings in Biblical Hebrew: An Intermediate Textbook. New Haven: Yale University Press, 1993. The understanding of biblical Hebrew grammar acquired in this class facilitates a deeper and more accurate analysis of biblical literature, sharpening the reader's interpretations and allowing for a fuller appreciation of this ancient corpus of texts. The first semester of Intermediate Hebrew will introduce students to the use of a biblical Hebrew dictionary, as well as basic knowledge of a critical edition of the Hebrew Bible, a concordance, reference grammar, and biblical commentaries. Students taking this course must have a minimum of one year of college-level (or equivalent) Hebrew language study (normally Beginning Biblical Hebrew I and II). This course will be rigorous and high expectations will be placed on all the students. Please do not hesitate to ask for clarification on any issue or come see me for extra help.

**Style:** 40% Lecture, 60% Discussion.

**Grading:** 25% mid exam, 30% final exam, 10% reports/papers, 15% quizzes, 20% class participation.

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**Hebr 3951W Major Project**

4 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF
Hebr 3980 Directed Instruction
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Hebr 3993 Directed Studies
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Schneller, Renana Segal
Description: Student may contact the instructor or department for information.

Hebr 4001 Beginning Hebrew I
3 credit(s); grad student Credit will not be granted if credit has been received for: HEBR 1001;
Instructor: Schneller, Renana Segal
Description: Modern Israeli Hebrew seeks to serve several kinds of students. Typically, students in this course present a wide variety of backgrounds and interests, which include Jewish, or Israeli cultural studies, archaeology, linguistics, travel or work in Israel, and biblical studies. This is a course for complete beginners. You will learn basic listening, speaking, reading and writing skills with stress on proficiency in communication. Cultural materials are incorporated. The course serves as a good base for subsequent work in biblical Hebrew. The difference between this course and Hebr 1104, Biblical Hebrew, is that this course has a spoken, conversation component and prepares students to read texts without the diacritic marks. (This reading skill is necessary for those interested in reading Hebrew journal articles and post-biblical Hebrew commentaries.) The pronunciation of Hebrew taught will be the same in both courses.

Hebr 4011 Intermediate Hebrew I
3 credit(s); Grade of at least [C- or S] in [1002 or 4002] or instr consent Credit will not be granted if credit has been received for: HEBR 3011;
Instructor: Schneller, Renana Segal
Description: Student may contact the instructor or department for information.

Hebr 4106 Intermediate Biblical Hebrew I
3 credit(s);
Instructor: Jassen, Alex P
Description: This course offers a review and nuancing of key concepts of biblical Hebrew grammar in the context of readings of a wide range of texts from the Hebrew Bible. Attention will be paid to mastering skills for reading different genres of biblical Hebrew texts (e.g., narrative, poetry, legal texts, wisdom texts). Students will read the original text using a critical edition of the Hebrew Bible. The following textbook is used as an aid to train students in advanced reading of biblical texts: E. Ben Zvi, M. Hancock, and R. Beinert, Readings in Biblical Hebrew: An Intermediate Textbook. New Haven: Yale University Press, 1993. The understanding of biblical Hebrew grammar acquired in this class facilitates a deeper and more accurate analysis of biblical literature, sharpening the reader's interpretations and allowing for a fuller appreciation of this ancient corpus of texts. The first semester of Intermediate Hebrew will introduce students to the use of a biblical Hebrew dictionary, as well as basic knowledge of a critical edition of the Hebrew Bible, a concordance, reference grammar, and biblical commentaries. Students taking this course must have a minimum of one year of college-level (or equivalent) Hebrew language study (normally Beginning Biblical Hebrew I and II). This course will be rigorous and high expectations will be placed on all the students. Please do not hesitate to ask for clarification on any issue or come see me for extra help.
Style: 40% Lecture, 60% Discussion.
Grading: 25% mid exam, 30% final exam, 10% reports/papers, 15% quizzes, 20% class participation.

Hebr 5090 Advanced Modern Hebrew
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Schneller, Renana Segal
Description: Student may contact the instructor or department for information.

Hebr 5992 Directed Readings
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.
Hindi and Urdu

HnUr 1101 Beginning Hindi and Urdu
5 credit(s); credit will not be granted if credit already received for: HNDI 1101/4001 and URDU 1101/4001 Credit will not be granted if credit has been received for: HNUR 4001;
Instructor: Durham-Shapiro, Emily
Description: This course is designed to give a basic knowledge of Hindi-Urdu to beginners with little or no prior experience with the language. Students will learn the basics of proper use of the language to greet a person according to his/her age, religion, status; to introduce self and others; exchange information about families, homes, interests; to talk about daily routines, tell time and give the date and day. By the end of the semester, students will feel comfortable with the thematic vocabularies and the basic sentence structures of Hindi-Urdu. The Hindi script will be introduced right from the beginning and the Urdu script in the Intermediate level. Students will also learn about South Asian family structure; social customs; popular culture; use of proper language (formal/informal) in different situations.

HnUr 1101 Beginning Hindi and Urdu
5 credit(s); credit will not be granted if credit already received for: HNDI 1101/4001 and URDU 1101/4001 Credit will not be granted if credit has been received for: HNUR 4001;
Instructor: Hong, Sungok
Description: This course is designed to give a basic knowledge of Hindi-Urdu to beginners with little or no prior experience with the language. Students will learn the basics of proper use of the language to greet a person according to his/her age, religion, status; to introduce self and others; exchange information about families, homes, interests; to talk about daily routines, tell time and give the date and day. By the end of the semester, students will feel comfortable with the thematic vocabularies and the basic sentence structures of Hindi-Urdu. The Hindi script will be introduced right from the beginning and the Urdu script in the Intermediate level. Students will also learn about South Asian family structure; social customs; popular culture; use of proper language (formal/informal) in different situations.

HnUr 3101 Intermediate Hindi and Urdu
5 credit(s); 4002 credit will not be granted if credit already received for HNDI 3131/4003 or URDU 3131/4003 Credit will not be granted if credit has been received for: HNUR 4003;
Instructor: Hong, Sungok
Description: This course is the first of a two semester sequence of Intermediate Hindi-Urdu. It is designed to extend the knowledge of students who can already read and write Hindi at the novice high level and have control of Hindi-Urdu grammatical concepts. At this level, the students will achieve proficiency in spoken Hindi-Urdu by building upon what they have learned in the first year, and be well equipped to express themselves on a range of topics. One of the goals of this course is to make the students more familiar with literary Hindi, and it will therefore utilize Hindi essays, short stories, dramas, and newspaper and magazine articles for its readings. The Urdu script will be introduced in this semester and by the end of this semester, students will feel comfortable with the Urdu script and start to read children’s stories and folk tales in Urdu.

HnUr 4001 Beginning Hindi and Urdu
3 credit(s); credit will not be granted if credit already received for: HNDI 1101/4001 and URDU 1101/4001 Credit will not be granted if credit has been received for: HNUR 1101;
Instructor: Durham-Shapiro, Emily
Description: This course is designed to give a basic knowledge of Hindi-Urdu to beginners with little or no prior experience with the language. Students will learn the basics of proper use of the language to greet a person according to his/her age, religion, status; to introduce self and others; exchange information about families, homes, interests; to talk about daily routines, tell time and give the date and day. By the end of the semester, students will feel comfortable with the thematic vocabularies and the basic sentence structures of Hindi-Urdu. The Hindi script will be introduced right from the beginning and the Urdu script in the Intermediate level. Students will also learn about South Asian family structure; social customs; popular culture; use of proper language (formal/informal) in different situations.

HnUr 4001 Beginning Hindi and Urdu
3 credit(s); credit will not be granted if credit already received for: HNDI 1101/4001 and URDU 1101/4001 Credit will not be granted if credit has been received for: HNUR 1101;
Instructor: Hong, Sungok
Description: This course is designed to give a basic knowledge of Hindi-Urdu to beginners with little or no prior experience with the language. Students will learn the basics of proper use of the language to greet a person according to his/her age, religion, status; to introduce self and others; exchange information about families, homes, interests; to talk about daily routines, tell time and give the date and day. By the end of the semester, students will feel comfortable with the thematic vocabularies and the basic sentence structures of Hindi-Urdu. The Hindi script will be introduced right from the beginning and the Urdu script in the Intermediate level. Students will also...
learn about South Asian family structure; social customs; popular culture; use of proper language (formal/informal) in different situations.

HnUr 4003 Intermediate Hindi and Urdu
3 credit(s); 1102, 4002 credit will not be granted if credit already received for HNDI 3131/4003 or URDU 3131/4003 Credit will not be granted if credit has been received for: HNUR 3101;
Instructor: Hong, Sungok
Description: This course is the first of a two semester sequence of Intermediate Hindi-Urdu. It is designed to extend the knowledge of students who can already read and write Hindi at the novice high level and have control of Hindi-Urdu grammatical concepts. At this level, the students will achieve proficiency in spoken Hindi-Urdu by building upon what they have learned in the first year, and be well equipped to express themselves on a range of topics. One of the goals of this course is to make the students more familiar with literary Hindi, and it will therefore utilize Hindi essays, short stories, dramas, and newspaper and magazine articles for its readings. The Urdu script will be introduced in this semester and by the end of this semester, students will feel comfortable with the Urdu script and start to read children’s stories and folk tales in Urdu.

Hist 1102W The Age of Global Contact
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Gabaccia, Donna R
Description: This class surveys world history from about 1500. Although we often assume that globalization is a new phenomenon made possible by jet planes and cell phones, in fact, the rise of global interaction has a history dating back at least to Columbus’s voyage in 1492. We will examine the historical growth -- and decline -- of globalization by following the movements of people, goods, and ideas. The course is designed for majors and non-majors alike. It will introduce students to how historians understand the past and will teach important analytical skills. Writing will be emphasized in the discussion sections. The course fulfills lower-division writing intensive requirements.
Style: 75% Lecture, 25% Discussion.
Grading: 30% final exam, 10% quizzes, 50% written homework, 10% in-class presentation.
Exam Format: Essay

Hist 1031W Europe and the World: Expansion, Encounter, and Exchange to 1500
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Hist 1301W Authority and Rebellion: American History to 1865
4 credit(s); Fr or soph or non-hist major Credit will not be granted if credit has been received for: HIST 1301V; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Norling, Lisa A
Description: This innovative course uses the themes of "authority" and "rebellion" to explore American history from the early colonial period through the Civil War. It offers a four-credit writing-intensive investigation of three tumultuous centuries of conflict and change. How did people envision and struggle for a "new world order"? Whose hopes were realized, and whose were thwarted? Lectures and discussion sections are organized around significant themes such as the role of religion and challenges to religious authority, the transition to capitalism; native peoples’ negotiation of the European presence, the meanings of "liberty" over time, and the ongoing existence of slavery in American life. Lectures and readings focus on close examination of crucial episodes that illuminate these themes. Throughout, we will situate our analysis in the global context from which the United States emerged. We will examine how historians use evidence to produce knowledge about the past, and we will explore the value and the limitations of historical sources. Students will write short essays (3-4 pages) on a number of the themes, one short research paper, and take periodic quizzes on the course materials.

Hist 1301W Authority and Rebellion: American History to 1865
4 credit(s); Fr or soph or non-hist major Credit will not be granted if credit has been received for: HIST 1301V; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Green, George David
Description: This innovative course uses the themes of "authority" and "rebellion" to explore American history from the early colonial period through the Civil War. It offers a four-credit writing-intensive investigation of three tumultuous centuries of conflict and change. How did people envision and struggle for a "new world order"? Whose hopes were realized, and whose were thwarted? Lectures and
discussion sections are organized around significant themes such as the role of religion and challenges to religious authority, the transition to capitalism; native peoples' negotiation of the European presence, the meanings of "liberty" over time, and the ongoing existence of slavery in American life. Lectures and readings focus on close examination of crucial episodes that illuminate these themes. Throughout, we will situate our analysis in the global context from which the United States emerged. We will examine how historians use evidence to produce knowledge about the past, and we will explore the value and the limitations of historical sources. Students will write short essays (3-4 pages) on a number of the themes, one short research paper, and take periodic quizzes on the course materials.

Hist 1302 W Global America: U.S. History Since 1865
4 credit(s); Fr or soph or non-hist major Credit will not be granted if credit has been received for: HIST 1308; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: James, Elliot
Description: Student may contact the instructor or department for information.

Hist 1411 W The Family from 10,000 BCE to the Present
4 credit(s); Fr or soph or fewer than 60 cr Credit will not be granted if credit has been received for: HIST 3411 W; Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Maynes, Mary Jo
Description: Since the beginning of human culture, the family has been a key site where world-historical processes have unfolded. Family life, in turn, has always been shaped by local and global historical dynamics. These two observations provide the starting point for this course. The course is organized around family dimensions of world history from prehistoric times to the present. We begin by examining the family as the site of emergence of the earliest human societies and evaluate evidence of family life and gender relations that challenge older notions of "Man the Hunter." We then look at connections between the evolution of family relations and the development of complex societies, states, and organized religions, drawing on evidence from several regions of the ancient world such as Mesopotamia, South Asia, and Africa. We explore how family practices help to account for the historical fate of different world regions in the era of European colonization that began around 1500. We look at the roles played by gender and generational relations in particular modernizing revolutions ranging from the French Revolution to the May Fourth Movement of China. We examine how political conflicts over the family played into fascist and colonial regimes and the Cold War in the 20th century. We end by examining the role of families in today's global economies and cultures in the Global North and the Global South. Throughout the course we will discuss the historical role of beliefs about family as well as family practices, and also in the family metaphors that shape political community (for example, the Five Relationships of Confucianism, the connection between royal power and paternal power in early modern Europe, or modern nationalist appeals to blood ties as the basis of citizenship). We draw on a wide range of historical sources including archaeological evidence, fiction, art and oral history as well as legal codes, census records, and memoirs. In weekly labs that are part of the course, students will investigate and learn to interpret a wide range of sources from which family history is reconstructed. Lectures, labs, and assignments will show how family life, often thought of as a relatively unchanging realm of merely private and local interest, in fact has played and continues to play a major role in world history.
Style: 45% Lecture, 15% Discussion, 15% Laboratory, 10% Small Group Activities, 5% Student Presentation, 5% Field Trips, 5% Web Based.
Grading: 10% mid exam, 30% reports/papers, 5% special projects, 15% reflection paper, 5% in-class presentation, 10% class participation, 15% laboratory evaluation. There will be a variety of forms of reports and papers; assignments include in-class or in-lab writing as well as writing done at home and brought to class and to the lab sections.
Exam Format: The mid-term exam will be a take-home. The final assignment is a paper not an exam.

Hist 1902 Freshman Seminar: Masculinities in the Americas
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Lindquist, Malinda A
Description: Student may contact the instructor or department for information.

Hist 1905 Freshman Seminar: Medieval Mediterranean Piracy
A-F only, 3 credit(s);
Instructor: Reyerson, Kathryn L
Description: Student may contact the instructor or department for information.

Hist 1905 Freshman Seminar: A History of the Drug Wars
A-F only, 3 credit(s);
Instructor: McNamara, Patrick J
Description: Student may contact the instructor or department for information.

Hist 3001 Public History
A-F only, 3 credit(s); Soph or jr or sr

Credit will not be granted if credit has been received for: AMST 3003;

Instructor: O'Brien, Jean Maria

Description: This course is both an introduction to public history and an examination into the contentious history of the U.S. naval base at Guantanamo Bay, Cuba. It provides an upper-level undergraduate introduction to the theory, methods, practice, and politics of public history. It allows students to explore the possibilities and challenges of the production and dissemination of histories in nonacademic settings. Students' work will be part of a collaboration involving universities and colleges across the United States, organized by the International Coalition of Sites of Conscience's Guantanamo Public Memory Project.

Style: 15% Lecture, 5% Film/Video, 15% Discussion, 30% Small Group Activities, 15% Student Presentation, 5% Field Trips, 10% Guest Speakers, 5% Web Based. Students will work collaboratively on public history projects both during and outside of class sessions.

Grading: 50% special projects, 15% reflection paper, 15% in-class presentation, 20% class participation. The grade will rely heavily on the engaged student who participates fully in all class components, including collaborative project work.

Hist 3010W Historical Research Seminar: Sex, Violence and Death in Victorian London

A-F only, 3 credit(s), max credits 12, 4 completions allowed; Meets CLE req of Writing Intensive

Instructor: Clark, Anna Kirsten

Description: In this course we will explore together the seamy underworld of Victorian Britain. With the techniques of historical investigation, we will survey the gaslight streets of Whitechapel, inquiring why prostitutes solicited men on streetcorners, even if they feared Jack the Ripper. We will trace the course of sewage from elegant apartments down through the streets and into water pumps, where children fetched the water that would infect them with cholera. We will discover why graves were covered with stout iron bars; the body snatchers who dug up fresh coffins to provide corpses for anatomists. Students will become historical detectives, for instance reading trial transcripts of robbery and murder from the Old Bailey Sessions and comparing them to newspaper accounts. We will look at Victorian maps which detailed the class compositions of neighborhoods. We will compare how other historical detectives interpret this evidence from the perspectives of medical history, history of crime, gender and sexuality history, and popular history. Popular histories are entertaining, but what do they leave out? Are they accurate? Students will learn how to write their own histories using these primary sources. Students who are planning to write a senior paper will also get a chance to work on their proposals.

Hist 3052 Ancient Civilization: Greece

3 credit(s);

Instructor: Evans, John Karl

Description: For a syllabus, please visit www.tc.umn.edu/~evans002/.

Style: 100% Lecture.

Grading: 33% mid exam, 67% final exam.

Exam Format: take-home essay

Hist 3053 Ancient Civilization: Rome

3 credit(s); Meets CLE req of Historical Perspectives

Instructor: Evans, John Karl

Description: A broad survey of the history and culture of Rome from its prehistoric origins in the 8th century BC to the decline and fall of the Roman Empire in the 3rd and 4th centuries AD. It is designed for undergraduates with no previous college-level coursework in ancient history. Emphasis is given to reading original sources in translation, and to the lectures that pursue broad historical themes such as the rise and fall of the Roman Republic, and the decline and fall of the Roman Empire. Secondary texts supplement the original sources and lectures. There are no term papers; all examinations are essay in format, and take-home. The syllabus can be found at: http://www.tc.umn.edu/~evans002/. Although dates differ from one year to the next, the course structure, exam format, and required readings remain the same.

Style: 100% Lecture.

Grading: 100% on mid-term and final exam; breakdown not yet determined

Exam Format: Essay

Hist 3054 Egypt of the Pharoahs

3 credit(s);

Instructor: Evans, John Karl

Description: For a syllabus, please visit www.tc.umn.edu/~evans002

Hist 3151W British History to the 17th Century

4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive

Instructor: Watkins, John

Description: Student may contact the instructor or department for information.
Hist 3347 Women in Early and Victorian America: 1600-1890
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3407; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Norling, Lisa A
Description: Wenches, witches, goodwives and warrior women! Introduction to all sorts of Early American women -- and the men in their lives, too -- and the powerful dynamics of gender and race in American history, 1600-1880. For any student; no background knowledge necessary. Topics include women's involvement in -- and the impact on women of -- European colonization in the Americas and the dispossession of native peoples, slavery, Revolution and nation-building, social reform, economic and technological change, westward expansion and Civil War, and transformations in politics and law, education, family life, gender roles, and sexuality. Course organized primarily as lecture with occasional films, large-group student discussion, in-class exercises. Average of 60-80 pages of reading per week, three short take-home essays, two exams.
Style: 80% Lecture, 20% Discussion.
Grading: 15% mid exam, 20% final exam, 50% reports/papers, 15% quizzes.
Exam Format: short identification, essay

Hist 3349 U.S. Women's Legal History
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Welke, Barbara Young
Description: Throughout American history the law has assigned rights and duties differently for women than for men, and differently among women depending on race, class, nationality, and sexuality. This course will provide students with a broad foundation in women's legal status from the colonial era through the 20th century. We will examine gendered aspects of American legal history, including citizenship; political and civil rights; marriage, divorce, and child custody; reproductive and physical autonomy; and economics and educational equality. We will be reading judges opinions, statutes, and other legal documents, as well as monographs, and watching films and listening to tapes of oral arguments before the U.S. Supreme Court. No legal background is anticipated. The reading load will vary from week to week, but in some weeks will require reading an entire book. I have taught this course for many years primarily as a discussion course. This year I will lecture more, but there will be plenty of time for questions and discussion.
Style: 65% Lecture, 5% Film/Video, 25% Discussion, 5% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 5% attendance, 20% reflection paper, 15% class participation.
Exam Format: in class with questions distributed in advance and notecard with outline day of exam

Hist 3401W Early Latin America to 1825
A-F only, 4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Weaver Olson, Nathan W
Description: Student may contact the instructor or department for information.

Hist 3411W The Family from 10,000 BCE to the Present
4 credit(s); Jr or sr or at least 60 cr Credit will not be granted if credit has been received for: HIST 1411W; Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Maynes, Mary Jo
Description: Since the beginning of human culture, the family has been a key site where world-historical processes have unfolded. Family life, in turn, has always been shaped by local and global historical dynamics. These two observations provide the starting point for this course. The course is organized around family dimensions of world history from pre-historic times to the present. We begin by examining the family as the site of emergence of the earliest human societies and evaluate evidence of family life and gender relations that challenge older notions of "Man the Hunter." We then look at connections between the evolution of family relations and the development of complex societies, states, and organized religions, drawing on evidence from several regions of the ancient world such as Mesopotamia, South Asia, and Africa. We explore how family practices help to account for the historical fate of different world regions in the era of European colonization that began around 1500. We look at the roles played by gender and generational relations in particular modernizing revolutions ranging from the French Revolution to the May Fourth Movement of China. We examine how political conflicts over the family played into fascist and colonial regimes and the Cold War in the 20th century. We end by examining the role of families in today's global economies and cultures in the Global North and the Global South. Throughout the course we will discuss the historical role of beliefs about family as well as family practices, and also in the family metaphors that shape political community (for example, the Five Relationships of Confucianism, the connection between royal power and paternal power in early modern Europe, or modern nationalist appeals to blood ties as the basis of citizenship). We draw on a wide range of historical sources including archaeological evidence, fiction, art and oral history as well as legal codes, census records, and memoirs. In weekly labs that are part of the course, students will investigate and learn to interpret a wide range of sources from which family history is reconstructed. Lectures, labs, and assignments will show how family life, often thought of as a relatively unchanging realm of merely private and local interest, in fact has played and continues to play a major role in world history.
Style: 45% Lecture, 15% Discussion, 15% Laboratory, 10% Small Group Activities, 5% Student Presentation, 5% Field Trips, 5% Web
Hist 3417 Food in History
3 credit(s); Meets CLE req of Environment; meets CLE req of Historical Perspectives
Instructor: Pilcher, Jeffrey Michael
Description: Modern society is fixated on food. When we're not watching celebrity chefs on TV, we're worrying about E. coli in our peanuts or the obesity epidemic. And we have it easy, historically speaking. Our ancestors were obsessed with the basic problem of avoiding starvation. This course is intended to help understand the significance of food in society from the earliest gatherers and hunters to the present with three main areas of focus. First, the class will examine the historical antecedents to the contemporary globalization of foods as well as the ways in which people have resisted globalization. Second, we will discuss how foods have helped to create and reinforce hierarchies in societies around the world. A third major theme will be the modern transformation of global diets caused by industrialization, colonialism, and proletarian migrations. The course will conclude by examining contemporary issues including the global spread of the fast food, biotechnology and the green revolution as well as body image and fusion cuisine.
Style: 70% Lecture, 30% Discussion.
Grading: 15% mid exam, 25% final exam, 60% written homework.
Exam Format: Essay

Hist 3419 History of Capitalism: Uneven Development Since 1500
3 credit(s);
Instructor: Isett, Christopher Mills
Description: This course traces the origins and development of capitalism from the sixteenth century English countryside to contemporary China. We examine how social and political institutions and relations configure in different places and in different ways the economic and market behavior of social classes, how goods are produced, the social division of labor (who produces what and for whom), and long-term economic outcomes. The course examines these issues in a variety of socio-political and national contexts, taking examples from Asia, Europe, and the Atlantic World (Europe, America and East Africa) to study the different forms taken by agricultural production (peasants, capitalist farmers, slave-based commodity production) and manufacturing (household handicrafts, industrial capitalism, and slave-based manufacturing). The course will also examine different approaches to the study of the origins of capitalism proposed by the classical economists (Smith, Malthus, and Marx) as well as contemporary neo-classical and Marxist theories of how the modern world economy came about. The course does not require an understanding of economic principles or language, and is accessible to those who have had no exposure to economics.

Hist 3423 Central American Revolutions
3 credit(s); Credit will not be granted if credit has been received for: CHIC 3423;
Instructor: McNamara, Patrick J
Description: Throughout the 1970s and 1980s, civil war and political violence swept the Central American isthmus. In an attempt to understand both the domestic and international factors that contributed to this upheaval, this course will examine the social, political, and economic issues that have shaped Central American history for nearly two centuries. We will focus primarily on the influences of colonial histories, capitalist development, ethnic and racial conflict, foreign intervention, the Catholic Church, and civil war throughout the region. We will emphasize both nation-state formation from the perspective of six independent countries (El Salvador, Guatemala, Honduras, Panama, Costa Rica, and Nicaragua), and broader region-wide experiences around export capitalism, military interventions,
armed uprisings, popular protest, emigration, and ethnic conflict. The course is organized around these two major approaches. We will begin with a comparative region-wide perspective as, “The Isthmus of Central America: Colonialism, Revolution, and the Struggle for Autonomy.” We will then focus on the six independent nations in the course section called, “The Nations of Central America: Independence, Nationalism, and the Struggle for Citizenship.”

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 25% mid exam, 25% final exam, 25% reports/papers, 25% class participation.

**Exam Format:** essay exams

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**Hist 3432 Modern Africa in a Changing World**

4 credit(s); Credit will not be granted if credit has been received for: AFRO 3432; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives

**Instructor:** Isaacman, Allen F

**Description:** This course offers an introduction to the history of the African continent over roughly the past one hundred and fifty years. The course begins by exploring the history of social and economic revolutions in the late 19th century and the transformations surrounding the end of the slave trade. We then move on to an examination of the context in which Europeans colonized the African continent, resistance to European imperialism and the factors that made the conquest possible. Next we look at the impact of colonialism on the daily lives and lived experiences of women and men, peasants and workers, old and young in their work places, households and communities. We are particularly interested in how Africa coped, creatively adapted, negotiated and struggled against colonial/imperial rule. Next we examine the emergence of African resistance and the struggle for liberation from the colonial powers after World War II. The final part of the course explores the problematic history of Africas transition to independence and the predicament of the post-colonial era as new African nations grapple with neo-colonialism, economic dependency, political and ethnic conflict, and inequality on various scales. We also explore the possibilities for and the problems facing a non-racial democratic order in the new South Africa. In addition to reading primary sources and secondary historical accounts, students will be asked to read novels and view three films -- The Battle of Algiers, Tsotsi and Blood Diamond. Allen Isaacman is a Regents Professor and has won the Distinguished CLA teaching award.

**Grading:** 30% mid exam, 40% final exam, 10% reports/papers, 20% class participation.

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**Hist 3444 Chicana and Chicano History: 1821-1945**

3 credit(s); Credit will not be granted if credit has been received for: CHIC 3444; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives

**Instructor:** Patino Jr, Jimmy Charles

**Description:** Student may contact the instructor or department for information.

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**Hist 3461 Introduction to East Asia I: The Imperial Age**

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: EAS 3461; 

**Instructor:** Wang, Liping

**Description:** This is a comprehensive introduction to East Asia (China, Japan, Korea, and Vietnam) from prehistoric times to the sixteenth century. It traces the evolution of major political and economic institutions as ways to understand basic structures of political authority and systems of resource distribution in these societies. It outlines major schools of East Asian philosophy and religions, such as Confucianism, Daoism, and Buddhism, and discusses their development and influence in each of the four countries. It analyzes some of the most important features of East Asian society, i.e., family structure and gender relationships in ideology as well as in practice. As part of the overview of East Asian society and culture, the course also introduces main modes of artistic expression through various kinds of visual materials as well as visit to museum. The course stresses the inter-connections within East Asia while highlighting the distinctive paths of historical changes in each of the four countries.

**Style:** 80% Lecture, 20% Discussion.

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**Hist 3468 Social Change in Modern China**

3 credit(s); Credit will not be granted if credit has been received for: HIST 5468; 

**Instructor:** Wang, Liping

**Description:** This course explores major issues in modern Chinese society. It begins with the Opium War in 1840 and traces the relationship between anti-drug effort and state building to the 1990s. It examines the New Culture Movement in the 1920s and links it to the emergence of cosmopolitan culture, new women, and popular nationalism. It retells the story of the Great Leap Forward in the 1950s and uses it to analyze the increasing urban/rural gaps under the PRC. It also devotes considerable time to the importance of gender and ethnicity since the early 20th century. Students will achieve a good understanding of modern China through reading and discussing up-to-date scholarship on these above themes and issues. This course is for undergraduate students, both majors and non-majors.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 80% reports/papers, 20% class participation.
Hist 3471 Modern Japan, Meiji to the Present (1868-2000)
3 credit(s); Credit will not be granted if credit has been received for: EAS 3471; Meets CLE req of Historical Perspectives
Instructor: Mizuno, Hiromi
Description: From the land of samurai to the only non-Western colonial power, from the destructed nation of WWII "war criminals" to the postwar miracle, Japan went through immense changes from the mid-19th to the 21st century. How did the Japanese leaders and people make these changes and why? How have the Japanese themselves understood their changing nation and relationship to the world? How can we make sense of Japan's complicated past that made the nation the "Japan" we know today? This course explores the intellectual, cultural, and political aspects of Japan's modernization, the Pacific War, and postwar development, using visual images from museums, cartoons, advertisement, and films as well as fictional and non-fictional writings. The course is based on lecture but also integrates various kinds of assignments that stimulate discussion.
Style: 90% Lecture, 10% Film/Video.
Grading: 25% mid exam, 25% final exam, 20% quizzes, 20% attendance, 10% other evaluation. attendance includes participation
Exam Format: Paper writing

Hist 3483 Hmong History Across the Globe
3 credit(s);
Instructor: Lee, Mai Na M.
Description: Hmong relations with the Chinese state and mass exodus into Southeast Asia. Hmong history and society in the context of lowland Southeast Asian states and Western colonial powers from 1800 to 1975. The course concludes by critically analyzing the dramatic displacement of Hmong to the West after 1975 and their initial integration into American and other Western societies. Themes include: Hmong and early indigenous Southeast Asian states (pre-1893), French colonial rule (1893-1955), and Hmong entanglement with the US as special guerrilla soldiers in a "Secret War" (1960-75) and becoming refugees across the globe. Religious, social, political, and gender and ethnic identity transformations are central. Grades are based on two midterms, discussions/class assignments, short critical papers, newspaper report, term paper, and a final exam.

Hist 3503 Ancient Iran
3 credit(s); Credit will not be granted if credit has been received for: CAS 3511;
Instructor: Bashiri, Iraj
Description: Ancient Persia played a vital role in the development of the cultures of the eastern Mediterranean Sea. In the north, while fighting the Greeks, Persia contributed to the rise of a number of intellectuals in the region of present-day southwestern Turkey. In the south, for two hundred and ten years Persia expanded Egyptian trade as far as India. In the center, Persia empowered the Phoenicians to control the Mediterranean Sea routes all the way to Gibraltar. The course studies these developments in the context of the growth of the empires of the Achaemenians and the Sassanians. The objectives of the course are: - Acquaint students with the culture of ancient Iran, especially the relation of that culture to other major ancient cultures - Equip students with the means for a better understanding and interpretation of the dynamics of ancient events - Teach students to distinguish different trends and accept them for what they are - Discuss the roots of ancient conflicts and show that, like people, cultures keep events in memory and act upon them - Examine aspects of ancient Egyptian, Greek, and Iranian cultures and their contribution to the formation of an ancient world civilization.
Style: 60% Lecture, 10% Film/Video, 10% Discussion, 20% Student Presentation.
Grading: 61% reports/papers, 36% quizzes, 3% attendance. There are 3 tests (quizzes).
Exam Format: Essay

Hist 3505 Survey of the Modern Middle East
3 credit(s); Credit will not be granted if credit has been received for: ARAB 3505; Meets CLE req of Global Perspectives
Instructor: Hakim, Carol
Description: The course examines the history of the modern Middle East. It reviews the main political events in the region during the 19th and 20th centuries, as well as the underlying social, economic, and intellectual issues that have shaped the history of the Middle East in the modern era. Topics to be covered include the decline of the Ottoman Empire, imperialism and colonialism, nationalism and the rise of the modern states, Political Islam, and the evolution of post-independence states and societies up until the present.

Hist 3507 History of Modern Egypt
A-F only, 3 credit(s);
Instructor: Hakim, Carol
Description: Egypt is the most populous country in the Arab world and it has throughout the modern era played a central role in the history of the region and set trends in the political, socio-economic, cultural and intellectual spheres. The course examines the history of modern Egypt. It reviews the main political events, as well as the underlying social, economic and intellectual issues that have shaped the history of this country in the 19th and 20th century. The course combines a chronological approach to the study of the history of modern Egypt with a more thematic focus on main issues and trends. Topics to be covered include: the impact of colonialism, imperialism, the rise of the national movement, the "failure" of the liberal experiment, the uses and abuses of the 1952 Revolution and its legacy, and the rise of Islamist movements.
Hist 3546 Islam and the West
3 credit(s); Credit will not be granted if credit has been received for: CAS 3533;
Instructor: Bashiri, Iraj
Description: Intellectual trends defining fundamental differences between Islam and the West arise from their respective historical, philosophical, and intellectual mindsets. The course examines contributing factors to tension, anxiety, and hatred between Muslims and the West, as well as aspects of Islamic and European cultures that inspire respect and emulation. Objectives: - Acquaint the students with the fundamental differences between Islam and Western culture. - Equip students with the means for a better understanding of international events. - Teach students to distinguish different trends and accept them for what they are. - Discuss factors that create tension, anxiety and hatred among peoples and nations. - Examine aspects of Islamic and European cultures that inspire respect and emulation
Style: 50% Lecture, 20% Film/Video, 10% Discussion, 20% Student Presentation.
Grading: 12% final exam, 27% reports/papers, 36% quizzes, 3% attendance, 12% in-class presentation, 10% other evaluation. Book Report
Exam Format: Essay

Hist 3613 History of the Crusades
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Reyerson, Kathryn L
Description: Taken as a whole, the Crusades make up one of the most fascinating episodes in the history of the Middle Ages. Our primary aim in this class will be to study the crusading phenomenon in its medieval context by engaging with the original documentary remains of the period. What motivated medieval European men and women to set out on the conquest of a land thousands of miles away, about which they knew very little? How did the papacy, as head of the Catholic Church, come to promote violence against the Muslim residents of that land as not merely justifiable, but as positively meritorious, as deserving of a great spiritual reward? How did the Muslim and also Jewish communities who were the primary targets of this violence respond to it, and how did the contact among Christians, Muslims, and Jews which the Crusades made possible transform relations among these groups, the three major monotheistic religions of the West? While focusing on the Crusades as an aspect of medieval history, we will also consider some of the larger questions raised by the history of these expeditions. What is the relationship between violence and religion? Does it differ in the Christian, Muslim, and Jewish traditions? What is the legacy of the crusades? Did they pave the way for the subsequent Western colonial ventures that eventually led to Western domination of much of the non-Western world? Did they set the stage for modern conflicts in the Middle East?
Style: 70% Lecture, 30% Discussion.
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.
Exam Format: essay exams

Hist 3637 Modern Russia: From Peter the Great to the Present
3 credit(s);
Instructor: Stavrou, Theofanis G
Description: Student may contact the instructor or department for information.

Hist 3704W Daily Life in Europe: 1300-1800
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Hill, Gabriel
Description: Student may contact the instructor or department for information.

Hist 3706 Baroque Rome: Art and Politics in the Papal Capital
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335; Meets CLE req of Historical Perspectives
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

Hist 3721 Studies in 20th-Century Europe From the Turn of the Century to the End of World War II: 1900-45
3 credit(s); Credit will not be granted if credit has been received for: HIST 5721;
Instructor: Ashkenazi, Ofer
Description: Student may contact the instructor or department for information.

Hist 3722 Studies in 20th-Century Europe From the End of World War II to the End of the Cold War: 1945-91
Hist 3727W History of the Holocaust
3 credit(s); Credit will not be granted if credit has been received for: RELS 3521W; Meets CLE req of Writing Intensive
Instructor: Ashkenazi, Ofer
Description: The term "Holocaust" refers to the deliberate, systematic murder of approximately 6 million Jews, as well as hundreds of thousands of Roma (Gypsies) and others, in Nazi dominated Europe between the years 1941-1945. The course will narrate the history of the Holocaust, its social, cultural and ideological origins, and its major influences on post-1945 developments. In addition, we will discuss the theories that seek to explain "how it could happen" and what is the "meaning" of it, the "lesson" it taught. In our inquiry we will use a variety of primary sources - such as films, television shows, memoirs, speeches, essays, short stories, etc. The diverse sources would provide us with clues for a better understanding of this unimaginable, tragic period in human history. The course does not require special linguistic abilities, although they are most welcome. Class time: 60% lecture, 40% discussion. Work Load: 8-10 pages of writing per semester: a take-home midterm exam (3-4 pages); final paper (4-5 pages); in-class multiple-choice final exam. Grade: 50% take-home exams (25% each); 30% final exam; 10% in-class final exam; 10% participation in class discussions.

Hist 3729 Nazi Germany and Hitler's Europe
A-F only, 3 credit(s);
Instructor: Ashkenazi, Ofer
Description: Student may contact the instructor or department for information.

Hist 3731 Modern France and Its Empire: Identity, Citizenship and the State 1780 to the Present
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Lorcin, Patricia M.E.
Description: The French revolution of 1789 was a turning point in European history; its impact and legacy were global. Starting with this event the course will trace the social, political and cultural history of France and its empires. It will examine why events in France had widespread repercussions and how France became an important player in the global context during the 19th and 20th centuries.

Hist 3778 Jews of the Islamic Mediterranean and Christian Europe, 7th-17th Centuries
3 credit(s);
Instructor: Schroeter, Daniel J
Description: The Jewish Diaspora that emerged in late antiquity and the early Middle Ages was remarkably diverse, while at the same time Jews shared common religious and cultural traditions. This course explores how Jews were shaped by the societies and cultures of the Islamic Mediterranean World and Christian Europe from 700 to 1700, while maintaining a distinctive identity. Under the dominant religions of Islam and Christianity, Jews developed autonomous religious and cultural institutions and communities, which frequently changed as Jews were influenced by and adapted to their cultural surroundings and changing historical circumstances. The relationship between diverse Jewish communities throughout the Muslim Mediterranean and Christian Europe is explored. The connections between communities were created and maintained through trade, travel, and the exchange of rabbinical culture and Jewish religious authority across political boundaries. While Jewish status differed under Muslim and Christian rule, this course explores how the experience of Jews was influenced by changing local circumstances, migrations, expulsions, violence, persecution, and resettlement in new locations with the expansion of trade routes and political change in both the Islamic and Christian worlds.
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 35% final exam, 30% reports/papers, 15% class participation.

Hist 3797 History of Population
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Roberts, Evan
Description: Why are you likely to be taller than your grandparents, and have fewer brothers and sisters than your parents? The answer can be found in significant changes in life & death, health & wealth, and sex & family life in the last two centuries. But these
issues have a longer history of change, and recent scholarship continues to debate why our lives are much longer and healthier than they were 200 years ago. HIST3797 introduces you to population history through analysis of controversial debates in the field, and exploring data describing human population. The course meets liberal education requirements for both global perspectives and social science. We look briefly at prehistoric and early modern population issues in the first month of the course, and spend the last 11 weeks of the class looking at topics related to the modern rise of population—the extraordinary growth in the world's population in the past 500 years. Significant population growth is related to significant changes in human lives: how old we can expect to live, how many children we have, and where we live. These changes are related to many of the social and economic changes you will study in other history or social science classes, and are fundamental to understanding the modern world that you live in. We also spend time thinking about how we measure change in a population, and time in the computer lab giving you the excitement of discovering how to measure population change for yourself. You will gain a deeper understanding of the relationship between different aspects of change in human population with a final paper on the demographic history of a particular country.

Style: 70% Lecture, 20% Laboratory, 10% Guest Speakers. Class time will include lectures, guest lectures and applied computer lab sessions. The labs will develop skills you can use in other courses and future employment.

Grading: 25% mid exam, 25% final exam, 50% reports/papers. Assessment includes * One 750 word essay (20%) * Essay and presentation on demographic history of one country (30%) * Midterm (25%) * Final (cumulative) exam (25%).

Hist 3802 "Sinners, Saints, and Savages": Religion in Early America
3 credit(s);
Instructor: Fischer, Kirsten
Description: The United States is home to an astonishing array of religious beliefs and institutions. While mutual toleration is now a widely-held ideal, it has not always been this way (nor is it universally shared today). This upper-level course, which is run as a discussion seminar, investigates how people of different faiths perceived, reacted to, and changed each other before 1800. Coming from different cultural backgrounds within North America, Europe, and Africa, the people who encountered each other in early America had divergent ideas about the divine and its intentions for humanity, about life here on earth and after death, as well as about racial difference, gender relations, the social order, and relations of authority. In these encounters we can see how religious faiths and institutions variously shaped experiences of European colonization, the growing slave-labor system, and the social order of the new United States. The intense, often coercive, and sometimes brutal conflicts over religion reveal much about the lived experience in early America, and they show that the eventual truce of pluralism and freedom of conscience in this country has been hard-won rather than easily assured. Please contact Prof. Fischer by email for syllabus (kfischer@umn.edu).

Style: 25% Lecture, 5% Film/Video, 60% Discussion, 10% Small Group Activities.
Grading: 75% reports/papers, 5% attendance, 20% class participation.

Hist 3809 The Peoples of Revolutionary America
3 credit(s);
Instructor: Fischer, Kirsten
Description: The United States, with its 18th-century war for independence and its resulting Constitution, has been hailed as a harbinger of democracy and as a role-model revolution. But what, precisely, was revolutionary about the young United States, and what were the limits of this experiment in self-governance? This course uses the tools of social, political, legal, and intellectual history to explore the making of the United States during a turbulent revolutionary age. We will discuss long-standing social tensions within the colonies in addition to the well-known resentment of British colonial policies that variously shaped hopes for political change. Multiple perspectives and shifting alliances made for a complex political landscape, and many Americans experienced the revolution as a civil war of sorts. We will examine how political protests and propaganda sought to forge a unified patriot front out of a much more complicated reality. Moving beyond the war years, the course focuses on new governmental structures and on the economic and political grievances that gave rise to rebellions within the young United States. The course also places the early Republic within the transatlantic context of revolutionary France and Haiti, both of which served as testing grounds for the U.S. commitment to the ideals of a democratic republic. One note of clarification: this course examines with relative brevity the topics that used to dominate courses on the American Revolution, namely military history and biographies of the political leaders of the new nation. Instead, we will focus on the grievances of ordinary people and on the larger international context to ask: Who participated and why? What did the American Revolution accomplish and what did it leave undone? How revolutionary was it? Please contact Prof. Fischer by email for further information (kfischer@umn.edu).

Style: 45% Lecture, 5% Film/Video, 40% Discussion, 10% Small Group Activities.

Hist 3821 United States in the 20th Century to 1945
3 credit(s);
Instructor: Paul, Andrew
Description: Student may contact the instructor or department for information.

Hist 3822 United States in the 20th Century Since 1945
3 credit(s);
Hist 3841 American Business History
3 credit(s);
Instructor: Green, George David
Description: The course discusses the place of business in the American economy, society, culture and political system, as well as the history of internal business development from the small family firm toward the large multi-divisional and multi-national firm so prominent today. We look closely at early merchant capitalism, development of transportation systems (especially railroads), industrialization and the rise of big business in the late 19th century, increasing government regulation of business and the politics behind it, and the emergence and influence of the modern corporation. Included will be nine half-hour TV programs created by the instructor, featuring such leading figures as Samuel Slater (early textile industry), James J. Hill, Andrew Carnegie, John D. Rockefeller, J.P. Morgan, Henry Ford and Alfred Sloan (of General Motors). Students have the choice of writing four short papers on assigned readings (and no final exam), or two of those papers plus an essay final exam.
Style: 70% Lecture, 20% Discussion.
Grading: 40% final exam, 60% reports/papers.
Exam Format: essays, from set of questions given out a week beforehand

Hist 3864 African American History, 1619-1865
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: AFRO 3864;
Instructor: Haltinner, Kristin
Description: Student may contact the instructor or department for information.

Hist 3868 Race, War, and Race Wars in American History
A-F only, 3 credit(s);
Instructor: Lindquist, Malinda A
Description: Race and war are powerful engines of change and both have fundamentally shaped how Americans think about themselves, their nation, and citizenship. From the Indian Wars, Mexican American Wars and Civil Wars to the World Wars, Cold Wars, Vietnam Wars, and the recent Iraq Wars, this course examines the complicated nexus between race and war. Examining these conflicts from the military's, the citizen-soldiers', racial minorities', and war hawks' and doves' perspectives, will allow students to unravel the relationships between war, democracy, patriotism, exclusion, violence, rhetoric, masculinity, and citizenship. Wars have transformed our racial and social landscapes, however, the gendered and classed nature of wartime experiences and military discourse will also receive considerable attention. All wars, however, are not waged by standing militaries. Racial violence, riots, and lynchings, that is, the race wars waged in rural, urban, and suburban America are also explored. The theme of war also invites a consideration of how the rhetoric of war (i.e. the War on Poverty, the Drug War, the Border or Immigration Wars, and War on Terror) has figured into racial politics and policy making. At the conclusion of this course, students will be familiar with how wars (foreign, domestic, and rhetorical) have transformed the racial geography of the nation and how race continues to inform contemporary debates.

Hist 3871 American Indian History: Pre-Contact to 1830
3 credit(s); Credit will not be granted if credit has been received for: AMIN 3871; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Phillips, Katie
Description: Student may contact the instructor or department for information.

Hist 3960 Topics in History: Hinduism
3 credit(s), max credits 16, 5 completions allowed;
Instructor: Skaria, Ajay
Description: Although Hinduism is today almost universally recognized as one of the major religions of India, scholars generally agree that the term "Hinduism" itself is of rather late origin, and that it gathers together many varied texts, sects, and practices that for several centuries had been identified by a series of different names. This course has three objectives: first, to introduce students to some of the texts that are today considered essential to Hindu philosophical and spiritual traditions; second, to study some of the most powerful debates about the meaning and significance of Hindu texts in modern times; and third, to consider the ways in which Hindu identity today plays a crucial role in the political landscape of India. Our course will also include more wide-ranging discussions regarding the academic study of religious faith, the ways in which disciplines such as anthropology and history approach traditions of faith, and the changing force of religion in a largely secular world. All readings in English.

Hist 3960 Topics in History: The Nature of the Cosmos
3 credit(s), max credits 16, 5 completions allowed;
Instructor: Shank, JB
Description: This course is an interdisciplinary course developed through a National Endowment for the Humanities "Enduring Questions" grant (for details about the grant, visit: http://www.neh.gov/grants/guidelines/EnduringQuestions.html) The guiding question of this course is "What is the nature of the cosmos?" and we will pursue the question by comparing cosmological understandings in different civilizations and historical periods. The course will begin by exploring what it means to ask this question, and what is involved in precisely trying to answer it. We will then look at some different answers offered across time and space. We will start with two ancient, non-Western responses, likely the Sanskrit Hindu tradition and a Native American tradition. We will then examine the history of Western cosmological thinking by looking at Greco-Roman Antiquity, Medieval Christian and Islamic understandings, and the birth of modern, scientific cosmology in the Scientific Revolution (Galileo, Newton, etc.). The class will end with some reflections on the place and meaning of these cosmological traditions in the world today.

Hist 3980W Supplemental Writing in History
1 credit(s), max credits 4, 4 completions allowed;Meets CLE req of Writing Intensive
Instructor: STAFF
Description: With the permission of the instructor of a history course, a student may add this one-credit independent study in order to make the course writing intensive. The student would then be expected to do additional written work, including the revision of at least one paper.

Hist 4961V Honors: Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Isaacman, Allen F
Description: Student may contact the instructor or department for information.

Hist 4961V Honors: Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Mizuno, Hiromi
Description: Student may contact the instructor or department for information.

Hist 4961V Honors: Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Dubrow, Gail Lee
Description: Student may contact the instructor or department for information.

Hist 4961V Honors: Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Blumenthal, Susanna Lynn
Description: Student may contact the instructor or department for information.

Hist 4961W Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Isaacman, Allen F
Description: Student may contact the instructor or department for information.

Hist 4961W Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Mizuno, Hiromi
Description: Student may contact the instructor or department for information.

Hist 4961W Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Dubrow, Gail Lee
Description: Student may contact the instructor or department for information.

Hist 4961W Major Paper
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Blumenthal, Susanna Lynn
Description: Student may contact the instructor or department for information.

Hist 5264 Imperial Russia: Formation and Expansion of the Russian Empire in the 18th and 19th Centuries
Hist 5802 Readings in American History, 1848-Present
A-F only, 3 credit(s);
Instructor: Welke, Barbara Young
Description: Student may contact the instructor or department for information.

Hist 5831 Cultural Fallout: The Cold War and Its Legacy: Readings
A-F only, 3 credit(s);
Instructor: May, Elaine Tyler
Description: This course will examine the culture of the Cold War as it developed in the years after World War II, how it affected and reflected the domestic politics, public policies, and civic life in the postwar era, the impact of domestic anti-communism, and the influence of American cultural politics abroad. We will examine how the Cold War shaped gender expectations, sexuality, class relations, racial justice and civil rights, and how its legacy has affected American politics, culture, and social life in the years since. The course will be organized in the form of a professional working group, with scholarly debates, discussions, and conference-style presentations. The purpose of this format is to model professional activities that you will engage in as you embark on your academic careers. Graduate school should serve not simply as the culmination of your education as students, but as the beginning of your career as scholars. As such, you are expected to read, write, and participate in the seminar at a level consistent with standards of professional academic life.

Hist 5900 Topics in European Modern History: Nationalism & National Identification in Mod. Eur.
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Cohen, Gary B.
Description: Student may contact the instructor or department for information.

Hist 5900 Topics in European Modern History: Baroque Rome: Art and Politics in the Papal Capita
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world’s great capitals.

Hist 5910 Topics in U.S. History: Gender and Sexuality
3 credit(s), max credits 16, 5 completions allowed;
Instructor: Kunzel, Regina G
Description: This course brings historical work on gender and sexuality (with an emphasis on U.S. contexts) into conversation with scholarship in interdisciplinary sexuality and queer studies. It is organized around themes and questions that animate recent scholarship on gender and sexuality that engages the past, broadly construed. Because gender and sexuality are structures through which race, migration, citizenship, empire, subjectivity, knowledge, identity, and embodiment are produced and circulated, we will also read work in which gender and sexuality are not central categories of analysis. We will think closely about methodologies used in the historical study of sexuality and gender, and about the challenges posed by those histories to historical methods. Bringing together foundational scholarship and pathbreaking recent work, our readings invite examination of the interactions between historical and theoretical approaches and the ways these interactions push scholarship in new directions.

Hist 5960 Topics in History: Colonialism/Post-Colonialism; Theory and Practice
3 credit(s), max credits 16, 5 completions allowed;
Instructor: LORCIN, PATRICIA M.E.
Description: Student may contact the instructor or department for information.

Hist 5960 Topics in History: Food and Drink in History
3 credit(s), max credits 16, 5 completions allowed;
Instructor: Pilcher, Jeffrey Michael
Description: Student may contact the instructor or department for information.

Hist 5962 Expansion of Europe
A-F only, 3 credit(s);
Hist 8900 Topics in European Modern History: Nationalism & National Identification in Mod. Eur.

Instructor: Ragnow, Marguerite

Description: This course will use primary sources as an entree into the global interaction fostered by European expansion into the wider world ca. 1000 CE to ca. 1750 CE. Students will learn how to handle archival and rare materials, how books were made in the Middle Ages and the early modern period, how to conduct archival research, and also learn the rudiments of paleography. Students will write an original research paper using the resources of the James Ford Bell Library, a world-renowned rare book, map, and manuscript library on the 4th floor of Wilson Library. At the end of the course, students will present their research in a public forum.

Style: 15% Lecture, 30% Discussion, 5% Laboratory, 60% Small Group Activities, 15% Student Presentation, 5% Field Trips.

Grading: 70% reports/papers, 30% class participation.

Hist 5964 Comparative Economic History

A-F only, 2 credits

Instructor: Issett, Christopher Mills

Description: Tracing the development of capitalism from the sixteenth century to the present, this course examines the origins of today's global economy and disparities in wealth and economic power. The course examines how social and political institutions and relations configure in different places and times, and in different ways, the economic and market behavior of social classes, how goods are produced, the social division of labor (who produces what and for whom), and long-term economic outcomes. The course examines these issues in a variety of socio-political and national contexts, taking examples from Asia, Europe, and North America to study the different forms taken by agricultural production (peasants, capitalist farmers, slave-based commodity production) and manufacturing (household handicrafts, industrial capitalism, and slave-based manufacturing). The course will also examine different approaches to the study of the origins of capitalism. The course does not require an understanding of economic principles or language, and is accessible to those who have had no exposure to economics.

Hist 8025 Politics of Historical Memory

A-F only, 3 credits

Instructor: Maynes, Mary Jo

Description: HIST 8025: The Politics of Historical Memory Fall 2012 theme: Interrogating the Archive: Preserving and Interpreting Knowledges of the Past. This seminar is a "Research Collaborative" - an interdisciplinary collaboration between Central European University in Budapest and the University of Minnesota on the broad theme of "Interrogating the Archive." The faculty involved are Mary Jo Maynes (History, UMTC), Leslie Morris (German, Scandinavian, and Dutch, UMTC), and Andrea Peto (Gender Studies, CEU.) The collaborative will introduce students to various emergent approaches to thinking about "the archive"; that is, in the broadest sense, records of the past and to question how some knowledges about the past get preserved and some repressed. We will organize our syllabus around topics and interdisciplinary approaches of interest to students in a wide range of fields including history, public history and museum studies, Holocaust and genocide studies, literature and cultural studies, legal studies, gender studies, and film studies. We will introduce students to the general topic of "interrogating the archive"; we will introduce a few specific examples of archives so as to offer a common hands-on experience. The archives on which we will focus include written personal narratives (such as memoirs and letters), visual/oral interviews (especially the Visual History Archive), and political tribunal testimonies. These selections are based on types of inquiry that have been the focus of research projects for the three co-instructors; we will use these exemplary archives to address a wide range of cross-disciplinary questions that are applicable to many innovative approaches to the archive. However we also encourage students to pursue their own archive-related projects in the seminar. In addition, we will take advantage of our two geographic sites to investigate one additional approach to the archive; namely, a comparative analysis of cities as "sites of history". We will look at how history has been concretized in our two cities (Minneapolis/St. Paul and Budapest) in comparison with literature on other select case-studies (such as Berlin, New York, Shanghai or Johannesburg). We will examine urban spaces, sites of historical commemoration and debates over them, and urban museums and public history projects. We will also look at the various types of migrations and diasporas that have brought people to and from these cities throughout history and how these diasporic histories are documented/archived/memorialized (or not). This seminar will involve simultaneous teaching on both sites. We will coordinate a seminar for graduate students on each of our campuses and connect our students with each other through video/internet technologies. We will invite students from the Research Collaborative seminar to submit papers based on their own interrogations of the archive for a research conference to be held at the University of Minnesota in Spring, 2013.

Style: 20% Lecture, 60% Discussion, 20% Student Presentation.

Grading: 30% reports/papers, 70% class participation. participation grade includes presentation and short papers posted on website
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Cohen, Gary B.
Description: Student may contact the instructor or department for information.

Hist 8910 Topics in U.S. History: Gender and Sexuality
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Kunzel, Regina G
Description: This course brings historical work on gender and sexuality (with an emphasis on U.S. contexts) into conversation with scholarship in interdisciplinary sexuality and queer studies. It is organized around themes and questions that animate recent scholarship on gender and sexuality that engages the past, broadly construed. Because gender and sexuality are structures through which race, migration, citizenship, empire, subjectivity, knowledge, identity, and embodiment are produced and circulated, we will also read work in which gender and sexuality are not central categories of analysis. We will think closely about methodologies used in the historical study of sexuality and gender, and about the challenges posed by those histories to historical methods. Bringing together foundational scholarship and pathbreaking recent work, our readings invite examination of the interactions between historical and theoretical approaches and the ways these interactions push scholarship in new directions.

Hist 8960 Topics in History: Historical Dimension of Modern Knowledge
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Shank, JB
Description: Student may contact the instructor or department for information.

Hist 8960 Topics in History: Colonialism/Post-Colonialism; Theory and Practice
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Lorcin, Patricia M.E.
Description: Student may contact the instructor or department for information.

Hist 8960 Topics in History: Food and Drink in History
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Pilcher, Jeffrey Michael
Description: Student may contact the instructor or department for information.

Hist 8990 Topics in Comparative History-Research: Comparative Economic History
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Isett, Christopher Mills
Description: Student may contact the instructor or department for information.

History of Medicine 510 Diehl Hall (Box 506 Mayo)

HMed 3001W Health, Disease, and Healing I
4 credit(s); Credit will not be granted if credit has been received for: HMED 3001V; Meets CLE req of Historical Perspectives;
meets CLE req of Writing Intensive
Instructor: Shackelford, Jole Richard
Description: History of Medicine 3001W is a writing intensive survey of the history of Western biomedical ideas, research, and health care practices from the ancient Mediterranean and Middle Eastern foundations to the clinical movement of the early nineteenth century. These ideas and practices have left their marks on modern medicine and help explain the origins and appeal of today's alternative medicines as well. Many of our attitudes about the proper relationship between patient and practitioner, for example, are founded on the ideas set down by Hippocrates and Galen in ancient Greece and Rome. Today's herbal medicine is also in large measure shaped by the experiences and discoveries of early European and Middle Eastern healers. Similarly, one can find the origins of modern pseudo-scientific and quack medicines in early modern theories about how to regulate the kinds of and amounts of stimulation that people receive from their environments, which were believed to affect the healthy flow of fluids and spirits throughout the body.
Style: 75% Lecture, 25% Discussion.
Grading: 15% mid exam, 25% final exam, 45% reports/papers, 15% class participation.
Exam Format: In-class, prose (essay-style) examinations.

HMed 3055 Women, Health, and History
3 credit(s);
Instructor: Tobbell, Dominique Avril
Description: This seminar investigates women's historical roles as healers, patients, research subjects, and health activists. Using primary and secondary literature, diaries, biographies, and archival materials, students will have latitude through the research and written assignments to explore individual interests. Historical topics to be covered include views of gender and the body, reproduction and childbirth, nursing, women physicians, public health reformers, alternative practitioners, the role of culture and government in health, and disparities in diagnosis, treatment, research, and health careers.

Style: 50% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities.
Grading: 25% reports/papers, 30% special projects, 30% journal, 15% class participation.
Exam Format: No exams

HMed 3065 Body, Soul, and Spirit in Medieval and Renaissance European Medicine
A-F only, 3 credit(s);
Instructor: Shackelford, Jole Richard
Description: The body is a natural topic in today's society. As a nation and as individuals we are often preoccupied with our physical self, our appearance, our health, our pleasures, and our material possessions. Our modern identity crises are moral as well as legal, physical as well as psychological, but are often framed in terms of scientific measures that determine the health and viability of the mind and body. But for the medieval European Christian, the mind and body were necessarily viewed in a spiritual as well as a corporate context - it made no sense whatsoever to think of the health of the body apart from the health of the soul, or the life of the individual body apart from the life of the communal body. During this semester we will examine how medieval and Renaissance European medical writers understood the body, soul, and spirit and how these medical conceptions affected extra-medical concerns. Specific topics to be considered include: The body and soul in medieval theology and cosmology; Religious conceptions of the body and soul; Medical conceptions in the medieval world; Medieval and Renaissance psychology; Medical astrology and its consequences; The medical normal and abnormal body; The medicine of reproduction and sexual identity; Death, burial, dissection, and resurrection in medical and religious perspective; The Macrocosmic body and the microcosmic body; Limits to human power and authority over the individual body; The anatomical and chemical body and spirit.

Style: 95% Lecture, 5% Discussion.
Grading: 40% final exam, 60% other evaluation. 2 mid-term examinations, 30 % each.
Exam Format: Essays and short prose identifications or explanations

HMed 3600 Directed Study
1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Gunn, Jennifer
Description: Student may contact the instructor or department for information.

HMed 4960 Senior Research Topics in Medical History
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Thomas, Mary Margaret
Description: Student may contact the instructor or department for information.

HMed 8112 Historiography of Science, Technology, and Medicine
A-F only, 3 credit(s);
Instructor: Jones, Susan D.
Description: Student may contact the instructor or department for information.

HMed 8631 Directed Study
A-F only, 1-6 credit(s), max credits 12;
Instructor: Gunn, Jennifer
Description: Student may contact the instructor or department for information.

History of Science and Technology 381 Physics

HSci 1714 Technology and Civilization: Stone Tools to Steam Engines
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 3714; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Thomas, Mary Margaret
Description: Technology is an enormous force in our society, and this course asks how it became so important. We explore the historical background, development, and character of the most powerful technological systems the world has known, from pre-historic stone tool societies, through Egypt and the pyramids, ancient Greece and Rome, the explosion of Islam, and the dynamic and often violent technologies of medieval Europe. In this class, you will get to know your fellow students and find out what their interests are, and you will discuss historical problems with them. You will listen to lectures and see films about particular technologies, and you will...
learn to ask key questions about each technology: who was involved? what were the circumstances? The course is designed for undergraduates from a variety of backgrounds, including engineering, literature, history, business, and the sciences. 

**Style:** 60% Lecture, 25% Film/Video, 15% Discussion.  
**Grading:** 15% mid exam, 25% final exam, 30% reports/papers, 20% additional semester exams, 10% class participation. 1714 students will do three papers, 3-5 pages each. 3714 students will do one 12-15 page research paper, with three components.  
**Exam Format:** Combination short identification and essay.

### HSci 1715 Technology and Civilization: Waterwheels to the Web

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 3715; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society  
**Instructor:** Alexander, Jennifer Karns  
**Description:** HSCI 1715 is designed for undergraduates interested in technology and history, and enrolls students with wide interests in the liberal arts, science, and engineering. There is no prerequisite. We explore the historical background and development of the most powerful technological system the world has ever known: Western Europe's. We cover relations between technology and culture since the Industrial Revolution, the diffusion of industrial technologies around the world and how various cultures adopted/adapted them, and technology's social impact, especially on Western society. We begin with case studies of industrialization in Britain, Germany, and the United States, and the connection between industrialization and exploration and discovery. We next focus on how different societies created/reacted to technologies such as the steam engine and electricity, and how the small technologies of daily life contributed to the growth of a society increasingly dependent on technology. Finally, we look at the increasingly complex technological system that nations and corporations developed to manage people and machines, and how these technologies related to social, cultural, and scientific attitudes. We end by considering the technologies of violence and hope that have dominated much of the twentieth-century.  
**Style:** 65% Lecture, 35% Discussion.  
**Grading:** 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.  
**Exam Format:** Essay exams

### HSci 1815 Revolutions in Science: Lavoisier, Darwin, and Einstein

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 3815; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives  
**Instructor:** Janssen, Michel  
**Description:** This course is the second part of a two-semester introductory survey of the history of science. The two parts can be taken independently of one another. This class covers a selection of developments in physics, chemistry, biology, and geology from the 18th-20th C. We examine the reasoning of some of the leading scientists involved, while being sensitive to the broader social and cultural contexts in which they worked. We also pay attention to the ways in which we obtain knowledge in the history of science. To allow for meaningful analysis of the material, the course is clustered around a few pivotal episodes: the chemical revolution of the late-18th C., the Darwinian revolution of the 19th C and the relativity and quantum revolutions of the early-20th C. We also study the impact of these scientific developments on society. In particular, we look at the reaction of various religious groups to Darwin's theory and at the development of nuclear weapons made possible by the development of modern physics. We pay special attention to the increasingly international character of science during the period covered in this class, while emphasizing differences between the developments in various countries (notably Britain, Germany, France, and the United States). The objective of the course is to give you a better understanding not just of the historical development of scientific ideas but also of the role science plays in modern societies by tracing how it came to play that role.  
**Style:** 75% Lecture, 25% Discussion.  
**Grading:** 15% mid exam, 25% final exam, 45% reports/papers, 5% class participation, 10% other evaluation. attendance  
**Exam Format:** combination of short essay questions and multiple choice (old exams will be made available)

### HSci 3211 Biology and Culture in the 19th and 20th Centuries

3 credit(s); Credit will not be granted if credit has been received for: HSCI 5211; Meets CLE req of Historical Perspectives  
**Instructor:** Borrello, Mark E  
**Description:** The purpose of this course is to explore the development of the biological sciences from the 19th century naturalist tradition to the experimental, quantitative science of the 20th century. The course will focus on the areas of evolutionary biology, genetics, molecular biology and behavioral biology among others. From the outset, all of the varied branches of biology interacted in complex ways, yet each pursued its own set of questions and developed unique methods to investigate them. Through the examination of some of the key figures and advancements in biology we will develop a clearer understanding of the process of science. We will also pay close attention to the dynamic relationship between the science and the historical and cultural context within which they developed. The course will be divided into three sections. In the first section we will look at the naturalist tradition as represented in the work of Charles Darwin and A.R. Wallace and the early work in embryology and developmental biology. In the second section we will look at the development of genetics and its relation to evolutionary theory; and attempt to understand the complicated relationship between genetics and eugenics. Finally, we'll examine the recent history of molecular biology and the attempts to reconnect the study of genetics, development and evolution. This course provides an opportunity for the investigation of into the connections between
HSci 3244 History of Ecology and Environmentalism
3 credit(s); Credit will not be granted if credit has been received for: HSCI 5244; Meets CLE req of Environment; meets CLE req of Historical Perspectives
Instructor: Jones, Susan D.
Description: History of ecology as a scientific discipline, historical applications of ecology, and history of environmental ideas and movements that have called themselves "ecological" in the modern western world. Topics include the ecology of disease, colonial expansion and ecology, ecology and evolutionary theory, conservation versus environmentalism, urban ecology, ecology and politics, and aspects of the late-twentieth century environmental movement.
Style: 50% Lecture, 50% Discussion.
Grading: 30% mid exam, 30% final exam, 40% class participation.
Exam Format: short answer, identifications

HSci 3333V Honors Course: Issues in American Science and Technology in the Past Century
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Long, Tulley A
Description: Science and technology are everywhere in our world today, from the smartphone in your own hand to the forensic science on episodes of CSI to debates over North Korea's pursuit of nuclear technology. But have you ever wondered how science and technology became such profound and ubiquitous forces in American industry, government policy, popular culture, and everyday life? What are the moral responsibilities of scientists and engineers in a society where their work plays such a crucial role? In this course, we will answer these questions by exploring case studies through lectures, films, group discussion, reading, short formal writing assignments, and collaborative projects and presentations. We will look at the impact of fields like genetics and eugenics, large-scale engineering, and nuclear physics on American society from the early twentieth century up to the present. But we will also debate the ethical issues embedded in these fields and think deeply about how the political attitudes and cultural norms of a nation can shape the development of science and technology. There will be three class meetings per week: two meetings of the entire class for lectures, films, and presentations and one smaller group discussion at the end of the week. This honors course meets CLE requirements for the historical perspectives core, the citizenship and public ethics theme, and is a writing intensive course.
Style: 50% Lecture, 5% Film/Video, 35% Discussion, 10% Student Presentation.
Grading: Evaluation will take into consideration written assignments, a mid-term, and a final examination. Participation in class discussions and group work will also constitute a significant portion of a student's overall grade.
Exam Format: Short answer and essay

HSci 3401 Ethics in Science and Technology
3 credit(s); Credit will not be granted if credit has been received for: HSCI 5401; Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Dresser, Todd
Description: Ethical quandaries about science and technology permeate our lives. A quick glance at the news reveals a whole host of difficult questions that a person must navigate on a daily basis. We are asked to consider if drone strikes in Afghanistan justifiable? If so, how about drone surveillance in our home communities? Should we let children under age 13 on Facebook? Should all universities emulate Stanford and put many classes online and make them available to the world? Given the recent recalls of both ground beef and vegetables, can we trust that the food in the grocery store is safe and to what degree is locally sourced food better? To what extent was this summer's drought a vision of our climate's future and how should we alter our behavior in the face of a changing climate? Should we adopt a ?paleo diet?? Is ?attachment parenting? a la our prehistoric ancestors something that contemporary parents should emulate? All of these questions were in the air over summer vacation and they all, in one way or another, force us to make ethical decisions about science and technology. The goal of this course is to learn how to think through questions such as these from an ethical and historical perspective. We will take as our central premise that understanding the past on its own terms is, ironically, a fruitful way to address contemporary ethical issues regarding science and technology. People in the past understood the world and ethics and technology became such profound and ubiquitous forces in American industry, government policy, popular culture, and everyday life? What are the moral responsibilities of scientists and engineers in a society where their work plays such a crucial role? In this course, we will develop the historical context for five vexing issues raised by science and technology in our lives. We will try to understand how and why those problems evolved the way they did and we will try to build an ethical framework for navigating those problems in our own lives and times. It is my hope that, at the end of the semester, students will be better equipped to deal with the inevitable quandaries that will arise throughout the rest of your lives.

HSci 3714 Technology and Civilization: Stone Tools to Steam Engines
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1714; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
HSci 4321 History of Computing

Course examines the question "how do technologies change the world?" through the history of computing. Readings, discussions, and lectures on the people, technologies, ideas, and institutions of modern computing; and the uses of computers in computation, control, simulation, communication, and recreation. Developments in last 150 years: evolution of hardware and software; discussions, and lectures on the people, technologies, ideas, and institutions of modern computing; and the uses of computers in society. In particular, we look at the reaction of various religious groups to Darwins theory and at the contexts in which they worked. We also pay attention to the ways in which we obtain knowledge in the history of science. To allow for understanding not just of the historical development of scientific ideas but also of the role science plays in modern societies by tracing different societies created/reacted to technologies such as the steam engine and electricity, and how the small technologies of daily life contributed to the growth of a society increasingly dependent on technology. Finally, we look at the increasingly complex technological system that nations and corporations developed to manage people and machines, and how these technologies related to social, cultural, and scientific attitudes. We end by considering the technologies of violence and hope that have dominated much of the twentieth-century.

Style: 75% Lecture, 25% Discussion.
Grading: 15% mid exam, 25% final exam, 30% reports/papers, 20% additional semester exams, 10% class participation. 1714 students will do three papers, 3-5 pages each. 3714 students will do one 12-15 page research paper, with three components.

Exam Format: Combination short identification and essay.

HSci 3715 Technology and Civilization: Water wheels to the Web

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1715; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Janssen, Michel
Description: This class is the second part of a two-semester introductory survey of the history of science. The two parts can be taken independently of one another. This class covers a selection of developments in physics, chemistry, biology, and geology from the 18th-20th C. We examine the reasoning of some of the leading scientists involved, while being sensitive to the broader social and cultural contexts in which they worked. We also pay attention to the ways in which we obtain knowledge in the history of science. To allow for meaningful analysis of the material, the course is clustered around a few pivotal episodes: the chemical revolution of the late-18th C., the Darwinian revolution of the 19th C and the relativity and quantum revolutions of the early-20th C. We also study the impact of these scientific developments on society. In particular, we look at the reaction of various religious groups to Darwins theory and at the development of nuclear weapons made possible by the development of modern physics. We pay special attention to the increasingly international character of science during the period covered in this class, while emphasizing differences between the developments in various countries (notably Britain, Germany, France, and the United States). The objective of the course is to give you a better understanding not just of the historical development of scientific ideas but also of the role science plays in modern societies by tracing how it came to play that role.
Style: 75% Lecture, 25% Discussion.
Grading: 10% mid exam, 10% final exam, 65% reports/papers, 5% class participation, 10% other evaluation. attendance
Exam Format: a combination of short essay questions and multiple choice (old exams will be made available)

HSci 3815 Revolutions in Science: Lavoisier, Darwin, and Einstein

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1815; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Janssen, Michel
Description: This class is the second part of a two-semester introductory survey of the history of science. The two parts can be taken independently of one another. This class covers a selection of developments in physics, chemistry, biology, and geology from the 18th-20th C. We examine the reasoning of some of the leading scientists involved, while being sensitive to the broader social and cultural contexts in which they worked. We also pay attention to the ways in which we obtain knowledge in the history of science. To allow for meaningful analysis of the material, the course is clustered around a few pivotal episodes: the chemical revolution of the late-18th C., the Darwinian revolution of the 19th C and the relativity and quantum revolutions of the early-20th C. We also study the impact of these scientific developments on society. In particular, we look at the reaction of various religious groups to Darwins theory and at the development of nuclear weapons made possible by the development of modern physics. We pay special attention to the increasingly international character of science during the period covered in this class, while emphasizing differences between the developments in various countries (notably Britain, Germany, France, and the United States). The objective of the course is to give you a better understanding not just of the historical development of scientific ideas but also of the role science plays in modern societies by tracing how it came to play that role.
Style: 75% Lecture, 25% Discussion.
Grading: 10% mid exam, 10% final exam, 65% reports/papers, 5% class participation, 10% other evaluation. attendance
Exam Format: Essay and short answer exams

Instructor: Janssen, Michel
Description: This course is an introductory survey of the history of science. The two parts can be taken independently of one another. This class covers a selection of developments in physics, chemistry, biology, and geology from the 18th-20th C. We examine the reasoning of some of the leading scientists involved, while being sensitive to the broader social and cultural contexts in which they worked. We also pay attention to the ways in which we obtain knowledge in the history of science. To allow for meaningful analysis of the material, the course is clustered around a few pivotal episodes: the chemical revolution of the late-18th C., the Darwinian revolution of the 19th C and the relativity and quantum revolutions of the early-20th C. We also study the impact of these scientific developments on society. In particular, we look at the reaction of various religious groups to Darwins theory and at the development of nuclear weapons made possible by the development of modern physics. We pay special attention to the increasingly international character of science during the period covered in this class, while emphasizing differences between the developments in various countries (notably Britain, Germany, France, and the United States). The objective of the course is to give you a better understanding not just of the historical development of scientific ideas but also of the role science plays in modern societies by tracing how it came to play that role.
Style: 75% Lecture, 25% Discussion.
Grading: 10% mid exam, 10% final exam, 65% reports/papers, 5% class participation, 10% other evaluation. attendance
Exam Format: a combination of short essay questions and multiple choice (old exams will be made available)

HSci 3715 Technology and Civilization: Waterwheels to the Web

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1715; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Alexander, Jennifer Karns
Description: HSCI 1715 is designed for undergraduates interested in technology and history, and enrolls students with wide interests in the liberal arts, science, and engineering. There is no prerequisite. We explore the historical background and development of the most powerful technological system the world has ever known: Western Europe's. We cover relations between technology and culture since the Industrial Revolution, the diffusion of industrial technologies around the world and how various cultures adopted/adapted them, and technology's social impact, especially on Western society. We begin with case studies of industrialization in Britain, Germany, and the United States, and the connection between industrialization and exploration and discovery. We next focus on how different societies created/reacted to technologies such as the steam engine and electricity, and how the small technologies of daily life contributed to the growth of a society increasingly dependent on technology. Finally, we look at the increasingly complex technological system that nations and corporations developed to manage people and machines, and how these technologies related to social, cultural, and scientific attitudes. We end by considering the technologies of violence and hope that have dominated much of the twentieth-century.
Style: 65% Lecture, 35% Discussion.
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation. Students in the upper division (HSCI 3715) will have their exams graded by the professor, while teaching assistants grade the work of lower division students (HSCI 1715).
Exam Format: Combination short identification and essay.

HSci 3815 Revolutions in Science: Lavoisier, Darwin, and Einstein

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1815; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Alexander, Jennifer Karns
Description: This class is the second part of a two-semester introductory survey of the history of science. The two parts can be taken independently of one another. This class covers a selection of developments in physics, chemistry, biology, and geology from the 18th-20th C. We examine the reasoning of some of the leading scientists involved, while being sensitive to the broader social and cultural contexts in which they worked. We also pay attention to the ways in which we obtain knowledge in the history of science. To allow for meaningful analysis of the material, the course is clustered around a few pivotal episodes: the chemical revolution of the late-18th C., the Darwinian revolution of the 19th C and the relativity and quantum revolutions of the early-20th C. We also study the impact of these scientific developments on society. In particular, we look at the reaction of various religious groups to Darwins theory and at the development of nuclear weapons made possible by the development of modern physics. We pay special attention to the increasingly international character of science during the period covered in this class, while emphasizing differences between the developments in various countries (notably Britain, Germany, France, and the United States). The objective of the course is to give you a better understanding not just of the historical development of scientific ideas but also of the role science plays in modern societies by tracing how it came to play that role.
Style: 65% Lecture, 35% Discussion.
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation. Students in the upper division (HSCI 3715) will have their exams graded by the professor, while teaching assistants grade the work of lower division students (HSCI 1715).
Exam Format: Essay and short answer exams

HSci 4321 History of Computing

3 credit(s); Credit will not be granted if credit has been received for: CSCI 4921; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Misa, Thomas J
Description: Course examines the question "how do technologies change the world?" through the history of computing. Readings, discussions, and lectures on the people, technologies, ideas, and institutions of modern computing; and the uses of computers in computation, control, simulation, communication, and recreation. Developments in last 150 years: evolution of hardware and software;
growth of computer and semiconductor industries and their relations to other businesses; changing relationships resulting from new data-gathering and analysis techniques; automation; social and ethical issues

HSci 5211 Biology and Culture in the 19th and 20th Centuries
3 credit(s); Credit will not be granted if credit has been received for: HSCI 3211;
Instructor: Borrello, Mark E
Description: The purpose of this course is to explore the development of the biological sciences from the 19th century naturalist tradition to the experimental, quantitative science of the 20th century. The course will focus on the areas of evolutionary biology, genetics, molecular biology and behavioral biology among others. From the outset, all of the varied branches of biology interacted in complex ways, yet each pursued its own set of questions and developed unique methods to investigate them. Through the examination of some of the key figures and advancements in biology we will develop a clearer understanding of the process of science. We will also pay close attention to the dynamic relationship between the science and the historical and cultural context within which they developed. The course will be divided into three sections. In the first section we will look at the naturalist tradition as represented in the work of Charles Darwin and A.R. Wallace and the early work in embryology and developmental biology. In the second section we'll look at the development of genetics and its relation to evolutionary theory; and attempt to understand the complicated relationship between genetics and eugenicists. Finally, we'll examine the recent history of molecular biology and the attempts to reconnect the study of genetics, development and evolution. This course provides an opportunity for the investigation of into the connections between biology and the broader cultural, economic and political contexts.
Style: 50% Lecture, 50% Discussion.

HSci 5244 History of Ecology and Environmentalism
3 credit(s); Credit will not be granted if credit has been received for: HSCI 3244;
Instructor: Jones, Susan D.
Description: History of ecology as a scientific discipline, historical applications of ecology, and history of environmental ideas and movements that have called themselves “ecological” in the modern western world. Topics include the ecology of disease, colonial expansion and ecology, ecology and evolutionary theory, conservation versus environmentalism, urban ecology, ecology and politics, and aspects of the late-twentieth century environmental movement.
Style: 50% Lecture, 50% Discussion.
Grading: 30% mid exam, 30% final exam, 40% class participation.
Exam Format: short answer, identifications

HSci 5401 Ethics in Science and Technology
3 credit(s); Credit will not be granted if credit has been received for: HSCI 3401;
Instructor: Dresser, Todd
Description: Ethical quandaries about science and technology permeate our lives. A quick glance at the news reveals a whole host of difficult questions that a person must navigate on a daily basis. We are asked to consider if drone strikes in Afghanistan justifiable? If so, how about drone surveillance in our home communities? Should we let children under age 13 on Facebook? Should all universities emulate Stanford and put many classes online and make them available to the world? Should all universities emulate Stanford and put many classes online and make them available to the world? Given the recent recalls of both ground beef and vegetables, can we trust that the food in the grocery store is safe and to what degree is locally sourced food better? To what extent was this summer’s drought a vision of our climate’s future and how should we alter our behavior in the face of a changing climate? Should we adopt a ?paleo diet?? Is ?attachment parenting? a la our prehistoric ancestors something that contemporary parents should emulate? All of these questions were in the air over summer vacation and they all, in one way or another, force us to make ethical decisions about science and technology. The goal of this course is to learn how to think through questions such as these from an ethical and historical perspective. We will take as our central premise that understanding the past on its own terms is, ironically, a fruitful way to address contemporary ethical issues regarding science and technology. People in the past understood the world and developed technologies for their own reasons and could not foresee the world we live in. Yet, we inhabit a world bequeathed to us by people from the past. In this course we will develop the historical context for five vexing issues raised by science and technology. We will try to understand how and why those problems evolved the way they did and we will try to build an ethical framework for navigating those problems in our own lives and times. It is my hope that, at the end of the semester, students will be better equipped to deal with the inevitable quandaries that will arise throughout the rest of your lives.

HSci 5993 Directed Studies
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Borrello, Mark E
Description: Student may contact the instructor or department for information.

HSci 5994 Directed Research
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Jones, Susan D.
**HSci 8112 Historiography of Science, Technology, and Medicine**
3 credit(s);
**Instructor:** Jones, Susan D.
**Description:** Student may contact the instructor or department for information.

**HSci 8125 Foundations for Research in the Scientific Revolution**
3 credit(s);
**Instructor:** Boantza, Victor Dan
**Description:** Student may contact the instructor or department for information.

**HSci 8950 Seminar: Science and Technology in Cultural Settings**
3 credit(s);
**Instructor:** Alexander, Jennifer Karns
**Description:** How to characterize cultural change and whether it should be described as an evolutionary process has inspired debate since the time of Darwin and Spencer. In the last 25 years this topic has seen an explosive growth in interest, relevant theory, and new empirical studies. At the heart of these debates are arguments about the relevance of biological processes to cultural ones, and whether the processes are similar enough to justify the use of similar terms. Central to the question is the role of technologies in serving as cumulative repositories of human endeavor, which seem to enable humans to do more than merely adapt to their environments; technologies seem to enable humans to extend the reach of their adaptations beyond the individual and the group to allow widespread cultural change. This seminar investigates the ways in which cultural evolution and technological evolution are linked, through the acquisition and transfer of human skill, and through the organizational and intellectual scaffolding that enables societies to accumulate and build upon experiences and innovations.
**Style:** 90% Discussion, 10% Student Presentation. Almost all of class time will be devoted to discussion of readings.
**Grading:** 50% reports/papers, 50% class participation. Attendance is required.

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**Hmong 220 Folwell Hall**

**Hmng 1001 Introduction to Hmong Language**
5 credit(s); Credit will not be granted if credit has been received for: HMNG 1002
**Instructor:** Vang, Bee
**Description:** Student may contact the instructor or department for information.

**Hmng 1011 Beginning Hmong**
5 credit(s); Credit will not be granted if credit has been received for: HMNG 4001
**Instructor:** Vang, Bee
**Description:** Beginning Hmong 1011 is a course that teaches Hmong to true beginners (native speakers and non-native speakers). Students who have inherited the basics of the written language are advised to take the Accelerated Hmong course offers on Monday and Wednesday. The contents of Beginning Hmong 1011 include an exposure to the primary level of the written language, basic everyday conversation, and elementary vocabularies. The course will familiarize students with Hmong alphabets (tone markers, singular and plural vowels and consonants), pronunciation, sentence structure, and the parts of speech. Class activities will be designed surrounding health, education, and consumer themes. A minimum exploration of Hmong culture will be emphasized. Upon completion of this course, students are expected to be able to converse in simple Hmong dialogues and compose simple paragraphs.
**Required Texts** The text for the course is Phau Xyaum Nyeem Ntawv Hmong Dawb. There will also be supplemental materials provided by the instructor. You can find the Text at Paradigm.
**Style:** 50% Lecture, 25% Discussion. class and project activities
**Grading:** 30% final exam, 30% quizzes, 10% in-class presentation, 10% class participation, 10% problem solving, 10% other evaluation. Project
**Exam Format:** multiple choice, short answers, true/false

**Hmng 1011 Beginning Hmong**
5 credit(s); Credit will not be granted if credit has been received for: HMNG 4001
**Instructor:** LeYang, Maxwell
**Description:** Beginning Hmong 1011 is a course that teaches Hmong to true beginners (native speakers and non-native speakers). Students who have inherited the basics of the written language are advised to take the Accelerated Hmong course offers on Monday and Wednesday. The contents of Beginning Hmong 1011 include an exposure to the primary level of the written language, basic everyday conversation, and elementary vocabularies. The course will familiarize students with Hmong alphabets (tone markers, singular and plural vowels and consonants), pronunciation, sentence structure, and the parts of speech. Class activities will be
designed surrounding health, education, and consumer themes. A minimum exploration of Hmong culture will be emphasized. Upon completion of this course, students are expected to be able to converse in simple Hmong dialogues and compose simple paragraphs. Required Texts The text for the course is Phau Xyaum Nyeem Ntawv Hmong Dawb. There will also be supplemental materials provided by the instructor. You can find the Text at Paradigm.

**Style:** 50% Lecture, 25% Discussion. class and project activities

**Grading:** 30% final exam, 30% quizzes, 10% in-class presentation, 10% class participation, 10% problem solving, 10% other evaluation. Project

**Exam Format:** multiple choice, short answers, true/false

### Hmng 1015 Accelerated Beginning Hmong
- **Credit(s):** 5
- **Description:** Student may contact the instructor or department for information.

### Hmng 3021 Intermediate Hmong
- **Credit(s):** 5
- **Instructor:** LeYang, Maxwell
- **Description:** Student may contact the instructor or department for information.

### Hmng 3021 Intermediate Hmong
- **Credit(s):** 5
- **Instructor:** Vang, Bee
- **Description:** Student may contact the instructor or department for information.

### Hmng 3290 Hmong Language Teaching Tutorial
- **Credit(s):** 1
- **Instructor:** Vang, Bee
- **Description:** Student may contact the instructor or department for information.

### Hmng 4001 Beginning Hmong
- **Credit(s):** 3
- **Instructor:** Vang, Bee
- **Description:** This 4xxx-level course is a special option for graduate or professional students to take the 1xxx-level Beginning Hmong course for reduced credits. If you are a graduate or professional student, you may register for Beginning Hmong under the 4001 course number for 3 credits. Credit will not be granted if credit has been received for HMNG 1011. Beginning Hmong 4001 is a course that teaches Hmong to true beginners (native speakers and non-native speakers). Students who have inherited the basics of the written language are advised to take the Accelerated Hmong course offers on Monday and Wednesday. The contents of Beginning Hmong 4001 include an exposure to the primary level of the written language, basic everyday conversation, and elementary vocabularies. The course will familiarize students with Hmong alphabets (tone markers, singular and plural vowels and consonants), pronunciation, sentence structure, and the parts of speech. Class activities will be designed surrounding health, education, and consumer themes. A minimum exploration of Hmong culture will be emphasized. Upon completion of this course, students are expected to be able to converse in simple Hmong dialogues and compose simple paragraphs. Required Texts The text for the course is Phau Xyaum Nyeem Ntawv Hmong Dawb. There will also be supplemental materials provided by the instructor. You can find the Text at Paradigm.

**Style:** 50% Lecture, 25% Discussion. class and project activities

**Grading:** 30% final exam, 30% quizzes, 10% in-class presentation, 10% class participation, 10% problem solving, 10% other evaluation. Project

**Exam Format:** multiple choice, short answers, true/false

### Hmng 4001 Beginning Hmong
- **Credit(s):** 3
- **Instructor:** LeYang, Maxwell
- **Description:** This 4xxx-level course is a special option for graduate or professional students to take the 1xxx-level Beginning Hmong course for reduced credits. If you are a graduate or professional student, you may register for Beginning Hmong under the 4001 course number for 3 credits. Credit will not be granted if credit has been received for HMNG 1011. Beginning Hmong 4001 is a course that teaches Hmong to true beginners (native speakers and non-native speakers). Students who have inherited the basics of the written language are advised to take the Accelerated Hmong course offers on Monday and Wednesday. The contents of Beginning Hmong 4001 include an exposure to the primary level of the written language, basic everyday conversation, and elementary vocabularies. The course will familiarize students with Hmong alphabets (tone markers, singular and plural vowels and consonants), pronunciation, sentence structure, and the parts of speech. Class activities will be designed surrounding health, education, and consumer themes. A
minimum exploration of Hmong culture will be emphasized. Upon completion of this course, students are expected to be able to converse in simple Hmong dialogues and compose simple paragraphs. Required Texts: The text for the course is Phau Xyaum Nyeem Ntawv Hmong Dawb. There will also be supplemental materials provided by the instructor. You can find the Text at Paradigm.

**Style:** 50% Lecture, 25% Discussion. class and project activities
**Grading:** 30% final exam, 30% quizzes, 10% in-class presentation, 10% class participation, 10% problem solving, 10% other evaluation. Project

**Exam Format:** multiple choice, short answers, true/false

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**Hmng 4003 Intermediate Hmong**

3 credit(s); 4002, grad student
Credit will not be granted if credit has been received for: HMNG 3021;
Instructor: Vang, Bee
Description: Student may contact the instructor or department for information.

**Hmng 4003 Intermediate Hmong**

3 credit(s); 4002, grad student
Credit will not be granted if credit has been received for: HMNG 3021;
Instructor: LeYang, Maxwell
Description: Student may contact the instructor or department for information.

**Hmng 4005 Accelerated Beginning Hmong**

3 credit(s); Ability in basic spoken Hmong, grad student
Credit will not be granted if credit has been received for: HMNG 1015;
Instructor: LeYang, Maxwell
Description: Student may contact the instructor or department for information.

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**Honors Colloquia 20 Nicholson Hall**

**HCol 3801H Honors Challenge Course: Changing America: The Face of Immigration**

A-F only, 3 credit(s);
Instructor: Fennelly, Katherine
Description: In this interdisciplinary seminar, we will study the immigrant and refugee experience in America in the past and the present through readings, discussion, and service-learning with local immigrant and refugee serving organizations. We will address national and international issues related to immigrants and refugees in the US, while also focusing on communities, organizations, and topics specific to Minnesota. We will also consider why immigration has been considered a subject of "perennial debate" in the United States. Throughout the course we will explore four key areas: immigration and xenophobia, immigrant/refugee integration, immigrant rights, and immigration law and policy. Work load: 60-100 pages of reading per week Two 10-12 page analytical papers 6 brief blog entries based on readings Short weekly quizzes Group Project on Immigration 2012 U.S. Elections (Poster Presentation) Service learning Weekly service-learning journal entries Grade base: 30% Attendance and Participation, including service learning 25% Two 10-12 page analytical papers contrasting historical and contemporary perspectives of immigration 25% Group Project 10% short weekly quizzes 10% blog entries Why do immigrants come to the United States? What kind of "America" do they find once they're here? And why have Americans continuously debated the merits and demerits of immigration since the colonial era to the present? These are the questions that Erika Lee, Professor of History and Asian American Studies, explores in her research, writing, and teaching. Winner of a 2011 Arthur "Red" Motley Award for Excellence in Teaching in the College of Liberal Arts, Prof. Lee is the author of two award-winning books: At America's Gates: Chinese Immigration during the Exclusion Era, 1882-1943 and Angel Island: Immigrant Gateway to America as well as several articles on Asian American history and the history of immigration law in the United States. Katherine Fennelly is Professor of Public Affairs at the Hubert H. Humphrey School of Public Affairs, University of Minnesota. Katherine Her research and outreach interests include the human rights of immigrants and refugees in the United States, and the preparedness of individuals, communities and public institutions to adapt to demographic changes. She has been dean of the University of Minnesota Extension Service, a faculty member and department head at the Pennsylvania State University, and a faculty member at Columbia University School of Public Health. Fennelly is bilingual in Spanish and English and has worked and traveled extensively throughout Latin America. She holds a certificate of studies from the University of Madrid, a master's of philosophy, and a doctorate in adult education from Columbia University. Selected writings and a detailed curriculum vitae are available at http://www.hhh.umn.edu/people/kfennelly/

**HCol 3996H Honors: Research Internship**

A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Nunnally, Patrick
Description: Student may contact the instructor or department for information.

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**Honors Seminar 20 Nicholson Hall**

**HCol 3996H Honors: Research Internship**

A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Nunnally, Patrick
Description: Student may contact the instructor or department for information.
HSem 2025H Honors Seminar: U.S.A.: Depression America in literature and film
A-F only, 3 credit(s), max credits 6;
Instructor: Rabinowitz, Paula
Description: In the midst of the Great Recession, it is important to look back to the Great Depression and see how writers and artists -photographers, filmmakers, painters--responded to the devastating collapse of the economy during the 1930s. This course will survey an array of films from Hollywood and elsewhere, photographs from the Farm Services Administration, paintings by artist in the Works Progress (held in the Weisman Art Museum) and imaginative and theoretical writings by authors searching to document and critique the effects of widespread unemployment in the U.S and the rise of fascism abroad. This course is a seminar, which means you are responsible for coming to class, doing all the work and fully participating in all discussions and projects. The success of the course depends upon your deep engagement with the ideas generated by the materials we investigate in common and by whatever you can bring to the course as well. Paula Rabinowitz's work focuses on the interconnections among politics, literature, and visual culture in 20th century America. She is currently working on two projects: American Pulp: How Paperbacks Brought Modernism to Main Street, a book-length study of post-war paperbacks, and Habits of Being, a four-volume collection of essays on clothing, fashion, and material culture.

HSem 2039H Honors Seminar: Psychology of the Paranormal
A-F only, 3 credit(s), max credits 6;
Instructor: Smith, Susannah L
Description: In this seminar the best of the University's research and creative work is brought to you. Every Thursday afternoon, the Institute for Advanced Study offers a presentation -- a lecture, discussion, performance -- by leading scholars and artists from around the world and within the University. Seminar participants will attend the Thursdays at Four series and meet on Tuesdays to discuss the presentations, which will draw upon disciplines across the University. We will do supplemental readings related to the presentations and talk with presenters as their schedules allow. The fall presentation schedule should be available later in spring semester at http://ias.umn.edu/thursdays.php. This is the perfect seminar to introduce you to the rich variety of work done at the University. Almost every week you will read a short (5-45 pp.) assignment related to that week's presentation. Three short (2-3 pp.) papers are required for this course as well as attendance at all Tuesday seminar meetings and all Thursday presentations. Each student will lead one discussion section; one in-class presentation. Participation (including leading discussion) - 30% Paper 1 - 20% Paper 2 - 20% Paper 3 - 20% In-class Presentation - 5% Attendance - 5% Susanna L. Smith is a historian and the Managing Director of the Institute for Advanced Study. Her research is on Russian and Soviet music and national identity in the Stalin period; in her spare time she studies and performs Javanese gamelan. Her position at the Institute allows her to exercise her curiosity about a wide set of subjects, from physics to art, animal behavior to human psychology, and archeology to foreign policy.

HSem 2053H Honors Seminar: Psychology of the Paranormal
A-F only, 3 credit(s), max credits 6;
Instructor: Fletcher, Charles R
Description: Research has shown that most Americans hold one or more supernatural, paranormal or pseudoscientific beliefs. These include beliefs in mind reading, fortune telling, psychokinesis, remote viewing, therapeutic touch, out-of-body experiences, alien abduction, and cryptozoology (Bigfoot, the Loch Ness Monster, etc.). This course has two goals: The first is to introduce students to critical thinking and behavioral research methods. The second is to critically evaluate the evidence for a variety of supernatural, paranormal and pseudoscientific claims. Students will design and carry out their own experimental tests of these claims. The course will also include a guest lecture and demonstration by a local psychic. Reading per week: 40 Pages. Three written papers (3-5 pages each), one group presentation, 4 quizzes. Class structure: mix of lecture, discussion, and student presentations Grade base: quizzes: 20%; papers: 40%; group presentations: 40% Quiz format: multiple choice, short-answer essay Charles R (Randy) Fletcher holds a B.A. in Psychology from the University of California at Berkeley and a Ph.D. in Psychology from the University of Colorado at Boulder. He conducts research on the psychological processes involved in reading and language comprehension. He teaches the Psychology Department's Honors Research Practicum and a course on The Psychology of Language.

HSem 2101H Honors Seminar: Food and Drug Safety: Whom Can You Trust?
A-F only, 2 credit(s), max credits 6;
Instructor: Siliciano, Paul G
Description: HSem 2101H Food and Drug Safety: Whom can you trust? Each time you pick up the newspaper, you are likely to find an article describing concerns about food or drug safety. Often, new studies are released that contradict the findings of previous studies. For example, hormone replacement therapy for post menopausal women has been through repeated cycles of recommendation and rejection over the past 30 years. How does the consumer know which study to believe? Consider the case of Vioxx, a non-prescription pain reliever and anti-inflammatory drug, which was widely prescribed and earned billions of dollars for Merck. Five years after its introduction, Vioxx was linked to heart disease and withdrawn, and Merck lost billions in lawsuits. How did Vioxx go from wonder drug to potential poison? Why did the safety testing not reveal this serious complication? This seminar will introduce students to the processes of food and drug testing, basic statistical analysis, and elementary biochemistry. Students will use the primary literature to research safety studies, and to learn how the body metabolizes foods and drugs. The course is designed for...
HSem 2413H Honors Seminar: Ideas, Insights, and Innovation
A-F only, 3 credit(s), max credits 3, 1 completion allowed;
Instructor: Nord,Tobin Lawrence
Description: This course is designed to introduce students to techniques for discovering everyday problems and fashioning potential solutions to those problems through the creation of new organizations. Because the course material deals with ideas and idea generation, it is designed to be helpful to many future careers and callings. During the semester we will explore the genesis of ideas and relationship between ideas, customer problems and innovation. Specific topics to be covered during the semester include the role of insights, ethnography and discovery techniques; individual and group creativity; and the use of structured ideation. This course seeks to provide students with the skills, tools, and mindsets to enable them to discover other people’s problems from which potential ventures might be built. These ventures include entrepreneurial start-ups, social ventures, and new businesses within large established organizations. The coursework will include readings, lectures, classroom activities, field activities, short reflection papers and journal, and presentations. Class structure: Discussion oriented and activity-based exercises provide the primary structure. Work load: approximately 20-30 pages per week reading; weekly journal/ reflections/ quizzes are normal; three team presentations Grade base: 35% team presentations, 10% participation, 5 % “post-mortem,” 50% quizzes, reflections, journal Toby Nord joined the University of Minnesota and the Carlson School of Management in 2006 after twenty years with local companies, the majority spent with Best Buy working in Strategic Marketing, Business Development, Strategy and Innovation. Some of this work is highlighted in the Harvard Business Case Best Buy: An Innovator's Journey. Toby is the Professional Director of the Carlson Ventures Enterprise and a Senior Lecturer at Carlson, teaching courses in Corporate Venturing, New Product Design & Business Development, Anthropology & Business, Design for Sustainable Development, and several Executive Education courses on innovation. Toby holds an MBA from the University of Minnesota and a BA from Hamline University. Harry Sapienza is the Curtis L. Carlson Chair in Entrepreneurial Studies at the Carlson School of Management, University of Minnesota. Harry is co-founder of the Carlson Ventures Enterprise and its former Academic Director. Harry is currently the Doctoral Program Coordinator for the Strategic Management and Organization Department. His research interests include the internationalization and emergence of new ventures, innovation and strategic decision making in entrepreneurial firms. Harry has taught entrepreneurship and strategy classes at the undergraduate, masters, and PhD levels. Besides his love of teaching and literature, his passions include family, baseball, and rhythm and blues.

HSem 2513H Honors Seminar: NANO! Small Science, Big Deal
A-F only, 2 credit(s), max credits 6;
Instructor: Penn, Lee
Description: This seminar will be devoted to NANO! Everyday, people encounter nanomaterials in products (e.g., in socks and cosmetics), technology (e.g., computer and phone components), medicine, and even in the environment (both natural and anthropogenic nanomaterials). Using the primary scientific literature, we will learn about nanotechnology, the fabrication of nanosized objects for specific applications, and how scientists characterize nano-sized objects (e.g., using electron microscopy). We will learn some of the basic science and consider the ethics of introducing new products with nano-ingredients or components. Class activities range from guest lectures to demonstrations of sub-nanometer resolution microscopes to reading popular fiction focusing on nano to synthesizing magnetic nanoparticles. Class structure: Classes will be a mixture of discussions, on-campus field trips, hands-on laboratory activities, and in-class projects. Work load: Students should plan on spending approximately four hours of week doing work for Nano. This work will be distributed between writing, reading, researching, and other activities. As this will be an honors seminar, the students will have a strong voice in deciding the nature of assignments and research topics. However, students should expect to write one paper that is approximately 8-10 pages and several shorter papers. In addition, students should expect to present during class. Grade base: Grading in this course will be based on your writings, presentations, and class participation. You will receive a grade on each of the approximately ten writing assignments (some of which will be written DURING class), no of two or three creative assignments. This course is graded A-F. 40% of the grade is based on your written assignments, 30% on your presentations and creative work, and the remaining 30% on participation in class and group activities. Grades for late submissions will be reduced by one grade level for each day late (e.g., A drops to a B for one day late). Lee Penn completed her BS in Chemistry at Beloit College and her PhD in m Materials Science at UW-Madison. She's been working with nanoparticles since the early 90s and has a passion for understanding their fundamental formation and growth mechanisms, how they are involved in chemical transformations in the environment, and elucidating the link between the physical and chemical properties of nanoparticles and how they participate in a wide range of chemical reactions. She has taught a range of courses, including honors
HSem 2701H Honors Seminar: War is Not Healthy: Shell Shock to Bio Warfare
A-F only, 3 credit(s), max credits 6;
Instructor: Gunn,Jennifer
Description: This seminar examines the relationship of war to medicine and health, from the U.S. Civil War to the first Gulf War. It is organized around five key themes: psychological injury; human experimentation; military medicine and disease; destruction of the land and people; and the rise of beneficial technologies. We'll explore early neurologists' attempts to understand phantom pain in Civil War amputees, shell shock in World War I, the psychological effects on displaced children and populations in World War II, and PTSD. Nazi medical experiments are infamous; we'll concentrate instead on the discovery of yellow fever in the Spanish-American war, Ancel Keys' WWII starvation experiments with conscientious objectors at the University of Minnesota, and biological warfare testing. Environmental destruction, through the use of defoliants like Agent Orange, land mines, atomic bombs, and biological warfare, targets soldiers and civilians alike with long-term health impacts. Yet war has also produced technologies that have shaped civilian medicine, from plastic surgery techniques to penicillin, blood storage, and trauma centers. Doing "hands on" history with primary documents and artifacts from local archives, museums, and special collections, students will create an integrated online learning unit on the medical and health history of World War I. Grade base: 5% Library skills assignment 15% Class participation (includes discussion, article analysis posts on Moodle, peer review, attendance) 10% Critical reading analysis essay (3 pages) 20% Problem-based investigation paper (2 drafts; 5 pages) 15% World War I Online Learning Unit (Thesis statement, secondary source analysis, and annotated bibliography) 20% Narrative history based on primary and secondary sources (2 drafts; 10 pages) 15% Online unit (visual and media images, text, learning activities; integrated with group) Jennifer Gunn is a historian of medicine who has researched the lessons of the 1918 global flu pandemic for contemporary emerging infectious diseases, taught about how the fields of nursing, psychology and psychiatry developed in wartime, mourned the broad social costs of wars in the past and the ones she's witnessed, and been fascinated by the beneficial technologies that emerge in war. As a Southerner, her idiosyncratic claim to fame is that she's been to the Alamo, but managed never to read a book about the Civil War until she went to grad school.

HSem 2801H Honors Seminar: Think like a Lawyer: The Art & Adventure of Torts
A-F only, 3 credit(s), max credits 6;
Instructor: Ha'Eni,Bobak F T
Description: This class is awesome, and by awesome I mean totally sweet. Want to know more? Read on: [DESCRIPTION] Law is the underpinning of modern society. No matter what career path you choose, our law and legal system affect it in some way. This seminar offers an introduction into legal thinking: Not merely what the laws are, but why we have them and, more importantly, how we come up with them. The ability to understand legal thinking is invaluable in any profession, from business to health to art. For our focus we'll ground ourselves in torts, a fundamental area of legal education that covers civil wrongs, other than contracts, for which the law provides a remedy. Students will have an opportunity to get a feeling for the law school experience as we use the case method, along with some Socratic method and ample discussion. We will focus on the basics of legal analysis, and learn how to apply that to critical thinking. Students successfully completing this seminar will be mentally armed and dangerous. [CLASS STRUCTURE] The class will be a mixture of discussion and Socratic method. We'll have a random array of guest speakers to entertain, scare and inform. By the end you will be prepared to attend law school or run away screaming. Proletariat and bourgeoisie welcome! Are you not entertained?! Join the adventure! [WORK LOAD] (1) Reading will be 4-8 cases of reading per week (individual cases can vary in page length and ease of reading); it averages around 30 pages. (2) Students will have 3-4 written assignments, consisting of case briefs, distributed throughout the semester. (3) Students will also have 3-4 "on call" days where they will be responsible for being particularly active during in-class discussion (though students not on call will be encouraged to join in). [GRADE BASE] 60% Case briefs (homework assignments) 40% Quality of in-class participation [WHO'S TEACHING] Bobak Ha'Eni is an attorney and graduate of the University of Minnesota Law School, where he is an instructor in the lawyering program. His work has covered FDA regulatory issues, torts, copyrights, trademarks and well as business start-ups. He strongly believes in helping students understand law, the legal process, and law school. Para continuar en espanol, oprima el dos (yo no hablo espanol).
Style: 5% Lecture, 90% Discussion, 5% Guest Speakers.
Grading: 60% written homework, 40% class participation. As you can see from this grading break-down, attendance is pretty important.

HSem 3008V Honors Seminar: Anthropology of Social Class
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Lipset,David M
Description: This course is divided into two parts, each of which has different but related purposes. The first part of the class has general and theoretical goals. First, differences between cultural anthropology and sociology with respect to the study of class difference will be introduced. Secondly, the major theories about hierarchy in pre-state society will be examined. Third, main theories and concepts in the study of class stratification in complex societies will be surveyed. The second part of the class will be comparative. It will focus on class ideology and social practices in France, USA, the UK and Latin America in particular. The focus will be on class in
everyday life. in the domains of education, consumption, romance, sport and carnival. Throughout the course, in addition, we will make use of representations of class in Western popular culture, such as magazines and the movies. Class structure: 1/3 lecture, 1/3 video materials and 1/3 active learning exercises and discussion. Work load: 30-50 pages per week, 2-5 pages per class, and a final. Grade base: Active learning= 16%, 2 midterms = 33%, Final= 17%. 2 writing assignments, 33% Exam format: midterms and final will consist of multiple choice questions and an essay. David Lipset is a cultural anthropologist, the author of two books and many articles. He has done fieldwork in Papua New Guinea since 1981.

HSem 3039H Honors Seminar: Sustainability & Planning on the Great River
A-F only, 3 credit(s), max credits 6; Meets CLE req of Environment
Instructor: Nunnally, Patrick
Description: HSem 3039H Living with the Mississippi River: Sustainability and Inclusive Planning on the Great River Living with the Mississippi gathers students from diverse colleges across the University and engages them with the Mississippi River's challenges in a way that allows them to produce a body of work that is directly relevant to the work of planning, policy-making, research and design toward a sustainable Mississippi River. Working collectively, biological and physical scientists, planners, designers, advocates, and people involved in public interpretation and education must develop a 21st century approach to living with the urban Mississippi, one that uses the river as a community, environmental, and economic asset without diminishing the river's key ecological functions upon which we depend. Students in this course will combine knowledge from natural and social sciences with policy, planning, and design frameworks to develop realistic, potentially feasible solutions to river-related challenges posed by community partners. Class structure: This seminar will undertake many "active learning" strategies during the semester with students, both individually and in groups, asked to lead discussions, short reflective writings assigned as discussion starting points, and extensive use of a course Moodle site as a means of establishing continuity among our discussions. Work load: Students are asked to read 2-4 short pieces every week; page numbers vary considerably because the general level of difficulty of the assignments is quite variable. Readings are drawn from professional and scholarly papers, agency technical and public reports, journalism, web-based readings, and other materials as appropriate. Written material for the course includes a field-web exercise (5-10 pp), a digital collection/assessment (7-10 pp + assets suitable for posting to the web), and the final project, which is usually a group project with each student's contribution encompassing 5 pages +/- in addition, students are asked regularly to write to Moodle-based forums; entries usually average a few paragraphs. Grade base: field exercise 20% digital collection 25% Moodle exercises 30% Final project/assessment 25% Patrick Nunnally coordinates the River Life program, which connects U of M teaching, research and programs with the Mississippi River and its broader watershed. Nunnally has worked in planning, interpretation, and resource management along the Mississippi for 15 years; that experience, and his existing network of community partners form the core of this seminar.

HSem 3051H Honors Seminar: Psychology of Malignant Political Aggression
A-F only, 3 credit(s), max credits 6; Meets CLE req of Civic Life and Ethics
Instructor: Sullivan, John L
Description: The first part of the seminar examines the power of conformity, denial and obedience in politics at the individual and collective levels. We will examine the underlying dynamics that can propel normal people into perpetrating malignant political aggression. An important theme will be the role played by threat perceptions and fear responses. To counterbalance the pessimism inherent in this topic, the second part of the seminar will examine political altruism and heroic political action. Considering work on political resistance, whistle-blowing and rescue activities, we will examine examples such as Le Chambon during World War II and the Mothers of the Plaza de Mayo in Argentina during the Pinochet regime. From this baseline we will extract theories and concepts to apply during the third part of the seminar, which will focus on the U.S. use of torture since 9-11 and resistance to this policy. Class structure: I will do some presentations; students will view and discuss five or six videos; there are five essay topics (students each write on two of the five topics) each of which will form the central focus of discussion during class on their due date; students will form small research teams to conduct a mini-research project on one of the class topics and they will present their results to the rest of the class; and students will conduct a larger, more in-depth research project either by forming research teams or working alone, as they choose. At the end of the semester, each student/team will make a longer class presentation on their project. Work load: About 100 pages a week. Some weeks are 200 pages while others are very low due to essays, research projects, etc. Exam format: Take home final essay John Sullivan has been at the University of Minnesota, where he is now a Regents Professor, since 1975. He teaches courses on political psychology, American politics and quantitative research methods. Professor Sullivan is a Fellow of American Academy of Arts & Sciences, winner of undergraduate and graduate teaching awards, and co-author or co-editor of Cooperation: The Political Psychology of Effective Human Interaction; The Political Psychology of Democratic Citizenship; With Malice Toward Some, Political Tolerance in Context; and Political Toleration & American Democracy.
Style: 20% Lecture, 15% Film/Video, 20% Discussion, 15% Small Group Activities, 20% Student Presentation, 10% Guest Speakers.
Grading: 20% final exam, 25% reports/papers, 15% special projects, 15% written homework, 5% in-class presentation, 20% class participation.

Horticultural Science 305 Alderman Hall

Hort 1001 Plant Propagation
4 credit(s); Meets CLE req of Biological Sciences
Instructor: Michaels, Thomas E
Description: Plant Propagation immerses you in learning the fundamental biological concepts of plant structure, growth and reproduction, and challenges you to apply these concepts in the greenhouse to hands-on plant propagation. You might have heard from others that Plant Prop is a challenging course with a great lab and that you get to take home the plants that you propagate. What you may not have heard is that in the Fall semester the course is taught with an alternative hybrid format. Before enrolling I would like you to think about whether this format is a good fit for you and the way you learn. The lecture content for this course will be delivered primarily on-line through the use of text, audio, video, and discussions hosted on Moodle. You must have reliable internet access several times each week to access lecture materials and the capacity to listen to downloaded mp3 audio lecture companion podcasts. You must also have weekly access to a rudimentary digital camera (it doesn't have to be fancy, but it does need to be able to take clearly focused closeups), and the ability to upload to Moodle forums. You will use the camera for your weekly homework. The most important thing though is that you really must have the self-discipline to set aside specific times every week to work through the online lecture material just as if you were going to a conventional lecture. The labs are taught in a conventional, face-to-face format on the St. Paul campus in a great greenhouse facility. Yes, you get to keep the plants you propagate. I will hold a face to face class meeting from 5:10 pm to 6:30 pm every Wednesday evening on the St. Paul campus. The class meeting is an opportunity for me to introduce the topics addressed in that week's on-line lecture and to answer questions students have about the previous week's topics. On three of those Wednesdays during our class meeting time you will have semester exams. The exam dates are October 3, October 31 and November 28. Based on previous years' official final exam schedules I expect the final exam to be held on Wednesday December 19 at 5:10 pm. You must accommodate these exam times in your schedule. I am likely to enthusiastically tell your friends and family about something new you learned about plants. And even though the lectures are on-line, the course doesn't feel cold and distant. The labs and class meetings provide a means of direct contact and a sense of community among instructors and students.

Style: 30% Laboratory, 10% Demonstration, 60% Web Based. Lectures are delivered on-line via WebVista and Moodle with mp3 lecture companion podcasts.

Grading: 37% mid exam, 8% final exam, 25% reports/papers, 10% quizzes, 10% written homework, 10% laboratory evaluation. Reports and Papers are associated with the laboratory projects. These percentages are approximations to assist with your registration planning.

Exam Format: Multiple choice, matching, draw and label diagrams, short answer, brief essay. Final will be comprehensive. These formats are approximations to assist with your registration planning.

Hort 1013 Floral Design
3 credit(s);
Instructor: Anderson, Neil O.
Description: Floral design is a course to educate students in the creation of professional floral designs to enhance the human experience in a variety of occasions. Floral design is a prime example of a horticulture discipline which encompasses a wide range of subjects across the educational spectrum, such as physics, mechanical engineering, art, history, horticulture, landscape architecture, architecture, liberal arts, music, business, human ecology, food science, biology, botany, ecology, medicine, and mortuary science. Flowers have historically been used to express emotions; we will examine the historic uses of flowers in various civilizations for celebrating human life and death, as well as how these uses influence our current floral design spectrum. Additional features of flowers, such as fragrance, will demonstrate the sensory value of their use. Students from a diverse array of majors, professional interests, and rank across the university (undergraduate, continuing education, MAST, Master of Agriculture, graduate, Regent's Scholars) enroll in Floral Design each year. Environmental Horticulture undergraduate students may enroll in this class to fulfill a Hort elective. The class is designed to allow your creative and artistic talents blossom as you learn to about the artistic use of flowers. It may be a welcome stress-reliever in your busy schedules. You will take floral arrangements home almost every week. Additionally, depending on your professional background, this course will aid in enhancing your career in any field.

Style: 18% Lecture, 15% Discussion, 67% Laboratory.

Grading: 40% mid exam, 10% reports/papers, 5% quizzes, 45% laboratory evaluation.

Exam Format: T/F, essay, observational

Hort 1015 Woody and Herbaceous Plants
A-F only, 4 credit(s);
Instructor: Hokanson, Stan C
Description: In this course you will learn skills that will allow you to identify plants from around the world. By the end of the term, you will have been introduced to a few hundred of the most important herbaceous and woody landscape plants for northern climates. You will learn their distinguishing identification features, common uses, cultural specificities, and notable cultivars. In addition to the regular class sessions, there will be one Saturday field trip during the term.

Style: 31% Lecture, 69% Laboratory.

Grading: 58% mid exam, 28% reports/papers, 14% quizzes.
Exam Format: fill in the blank, short answers

Hort 1031 Vines and Wines: Introduction to Viticulture and Enology
OPT No Aud, 3 credit(s);
Instructor: Haggerty,Luke L
Description: This course is an introduction to the principles of growing grapes (viticulture), making wine (enology), and an appreciation of the historical, geographical and sensory diversity of wine. The class will meet two evenings each week for a combination lecture/sensory session. There is one field trip to a local winery scheduled during the regular weekly class time. Upon completion of this course, each student will understand and have a working knowledge of the following concepts: 1. The process of fermentation and its role in wine production. 2. Fundamental principles of biology and culture of the grapevine. 3. Types of wine and their production differences. 4. The major grape-growing regions of the world, the most important grape cultivars in each region, and the characteristics of the wines produced in these regions. 5. Systematic evaluation of wine sensory characteristics. 6. Commercial wine labels and the information they provide. 7. The basic aspects of plant anatomy, using the grapevine as a model. 8. The major genetic factors in grapes that contribute to wine quality. 9. How cultural and environmental factors affect wine quality and yield. 10. Selection, planting, and cultivation of grapevines in a home garden. 11. Current issues involving wine and human health. 12. Current social and legal issues involving wine.
Style: 35% Lecture, 30% Discussion, 20% Small Group Activities, 5% Field Trips, 10% Guest Speakers.
Grading: 20% special projects, 56% quizzes, 16% written homework, 4% in-class presentation, 4% other evaluation.

Hort 1061 The Sustainable Lawn
3 credit(s);
Instructor: Watkins, Eric
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. Millions of acres across the United States are devoted to turfgrass. Home lawns, parks, athletic fields, golf course, and other turf areas play an important role in environmental quality. Homeowners have little knowledge about fertilizer and pesticide use, irrigation, and mowing. Although the impact of an individual homeowner may be small, the effect of millions of acres of home lawns can be significant. This course will focus on sustainable turfgrass management for the home lawn. The content will be presented in a fashion that focuses on environmentally responsible turfgrass management. The course will begin by presenting an overview of basic horticultural principles and then focus on turfgrass-specific topics. Lectures will provide information necessary for laboratory and discussion portions of the course. Students will learn how to identify common turfgrasses and then how to properly manage a home lawn in a sustainable way. The course will be presented entirely online and make extensive use of online discussion forums, wikis, blogs, and interactive Flash modules. Students will discuss important turfgrass science topics such as fertilizer run-off, pesticide use, and genetically-modified turf. This course will also equip students with the knowledge and tools necessary to maintain quality turf areas with reduced inputs, thereby reducing potential risk to the environment.
Style: Fully online.
Grading: 15% mid exam, 20% final exam, 10% reports/papers, 10% special projects, 10% quizzes, 5% in-class presentation, 10% problem solving. lab work 10%

Hort 1090 Directed Studies
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Watkins, Eric
Description: Student may contact the instructor or department for information.

Hort 1901 Topics: Freshman Seminar: The 10 Plants that changed Minnesota: Growing Solu
3 credit(s);Meets CLE req of Environment
Instructor: Meyer, Mary Hockenberry
Description: This seminar will focus on the impact of the 10 plants that have made the most difference in Minnesota. These plants changed the history of the state and have had a major impact on the economy, culture, health, food, arts and the environment. The weekly class will include guest lectures on environmental discussions, research that will result in written communications articles and K-12 activates for use in classrooms throughout the state. Attendance at a public lecture that will meet the same evening as the course will be an integral part of the class.
Style: 10% Lecture, 25% Discussion, 25% Small Group Activities, 15% Student Presentation, 10% Demonstration, 15% Guest Speakers. A portion of the class will be public lectures at the Arboretum.
Grading: 25% reports/papers, 25% special projects, 10% attendance, 15% in-class presentation, 10% class participation, 15% problem solving.

Hort 1942 Topics: Freshman Seminar: The American Lawn
A-F only, 3 credit(s);Meets CLE req of Technology and Society
Instructor: Watkins, Eric  
Description: This freshman seminar will examine the American Lawn in terms of its history, impact on society and the environment, and future. We will examine both the environmental and economic impact of lawns through scientific research articles. We will also discuss several technologies related to the lawn and how they affect society. Topics covered will include low-input lawns, pesticide fate, nutrient run-off, genetically modified turfgrass, and other related topics. Students will explore these topics through books, articles, research papers, field trips, and interactions with people involved in all aspects of the debate about the American Lawn. Writing and in-class presentations will give students opportunities to improve critical communication skills. Students will be exposed to important technologies, learn about the science behind the technologies, and discuss how these technologies can impact society.  
Style: 10% Lecture, 30% Discussion, 10% Small Group Activities, 5% Student Presentation, 10% Field Trips, 30% Guest Speakers, 5% Web Based.  
Grading: 35% special projects, 10% quizzes, 30% written homework, 5% attendance, 10% reflection paper, 10% class participation.

Hort 2031 Organic Food: How to Grow It, Where to Buy It, Can it Feed the World?  
3 credit(s);  
Instructor: Petran, Andrew Joseph  

Hort 2100 Agricultural Biochemistry  
A-F only, 3 credit(s);  
Instructor: Hegeman, Adrian D  
Description: This course provides a fundamental chemical and biochemical foundation needed to master biotechnological topics as growing part of agricultural disciplines. Subject matter emphasizes qualitative understanding of key concepts in organic, analytical and biological chemistry with special emphasis on the chemistry, metabolism and development of plants  
Style: 100% Lecture.  
Grading: 30% mid exam, 30% final exam, 30% quizzes, 10% attendance.  
Exam Format: multiple choice and short answer

Hort 3090 Directed Studies  
2-12 credit(s), max credits 72, 6 completions allowed;  
Instructor: STAFF  
Description: Approved field, lab or greenhouse experiences in application of horticultural information and practices.

Hort 3480 Topics in Turfgrass: Turfgrass Nutrients and Water Management  
A-F only, 3 credit(s), max credits 4, 1 completion allowed;  
Instructor: Horgan, Brian P  
Description: Student may contact the instructor or department for information.

Hort 4061W Turfgrass Management  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Watkins, Eric  
Description: This course will focus on the basics of turfgrass management. Students will learn the basic principles of turfgrass growth and development, establishment, fertilization, mowing, cultivation, and irrigation. Students will also be trained in turfgrass species identification and common turfgrass management calculations.  
Style: 20% Lecture, 15% Discussion, 15% Laboratory, 10% Small Group Activities, 5% Student Presentation, 5% Guest Speakers, 30% Web Based.  
Grading: 20% mid exam, 15% final exam, 25% reports/papers, 10% special projects, 10% quizzes, 5% in-class presentation, 5% class participation, 10% laboratory evaluation.  
Exam Format: short answer, essay

Hort 4071W Applications of Biotechnology to Plant Improvement  
4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Smith, Alan G  
Description: HORT 4071 Applications of Biotechnology to Plant Improvement The course is designed to provide a foundation in the theory and application of genetics and biotechnology used in crop improvement. The lecture meets twice per week to introduce and discuss the basic concepts of plant genetics and biotechnology. The laboratory will meet once or twice per week to provide hands-on experience in the methods used for crop improvement, analysis of data, practice in written communication of experimental data, and introduce students to the use and types of genetically modified crops. The discussion will meet alternatively to the laboratory and will consist of reading assignments, written assignments, and in-class exercises that are designed to develop the student's civic judgment
skills and capacities for ethical deliberation in a context of the risks, benefits and controversies of genetically engineered organisms.

**Style:** 25% Lecture, 2% Film/Video, 15% Discussion, 53% Laboratory, 5% Small Group Activities.

**Grading:** Special projects include brief oral reports on experimental results, discussion contributions and questions that are part of the lab reports.

**Exam Format:** Exams are primarily short to medium length essay with some fill in the blank or multiple choice.

**Hort 4096 Professional Experience Program: Internship**

- **S-N only, 1 credit(s), max credits 2;**
- **Instructor:** Watkins, Eric
- **Description:** Student may contact the instructor or department for information.

**Hort 4096W Professional Experience Program: Internship**

- **S-N only, 2 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Watkins, Eric
- **Description:** This course provides an opportunity for professional experience in horticultural businesses, government agencies, arboreta, and botanical gardens achieved through a supervised practical experience. Students will also produce a final publication that is focused on writing for lay audiences. This writing project will start just before the internship begins and end approximately two months after the internship is complete. The writing component of the course will be taught in an online format. HORT 4096W may not be repeated.

**Hort 4141W Plant Production I**

- **A-F only, 4 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Gillman, Jeffrey Hays
- **Description:** This course will cover the basics of nursery production including such things as irrigation, fertilization and soil management. Other topics that will be discussed include propagation, unique growing systems, and others.
- **Style:** 50% Lecture, 25% Discussion, 25% Laboratory.
- **Exam Format:** multiple choice and essay

**Hort 4461 Horticultural Marketing**

- **A-F only, 3 credit(s); APEC 1101 or ECON 1101 Credit will not be granted if credit has been received for: APEC 4461;**
- **Instructor:** Rihn, Alicia Louise
- **Description:** Horticultural Marketing supports the following SLOs: Can locate and evaluate information on primary and secondary data used in horticultural marketing; Have mastered a body of knowledge by learning the marketing techniques and practices of horticultural products; And can communicate effectively through group discussions and group projects. This course examines several major areas in horticultural marketing. First, we will introduce the difference between horticultural products and commercial commodities; Second, we analyze the functions performed by the horticultural marketing system. We analyze the marketing behavior of horticultural businesses (farms, wholesalers, garden centers?), cover the core marketing components that should be used by every small horticultural business; Finally, the basic approaches of consumer research (survey techniques, non-hypothetical experimental approaches, etc.) will be introduced. Students will apply these research approaches to develop marketing plans for horticultural businesses.
- **Style:** 70% Lecture, 10% Small Group Activities, 5% Student Presentation, 5% Field Trips, 10% Guest Speakers.
- **Grading:** 20% mid exam, 20% final exam, 20% reports/papers, 40% special projects.

**Hort 5012 Common Chinese Medicinal Plants: Growing and Processing**

- **3 credit(s);**
- **Instructor:** Chen, Changbin
- **Description:** Student may contact the instructor or department for information.

**Hort 5071 Ecological Restoration**

- **4 credit(s);**
- **Instructor:** Galatowitsch, Susan M
- **Description:** Ecological and physiological concepts are explored as a basis for regenerating grasslands, wetlands, forests and other landscapes. The extent to which restorations have succeeded or failed is often a reflection of the state of our understanding of ecological processes. Half of the course introduces students to the ecological and physiological concepts relevant to land restoration and reclamation. Readings from the primary literature are used to illustrate how restoration and reclamation efforts apply an ecological and/or physiological concept. Students discuss the extent to which land restoration and reclamation. Readings from the primary literature are used to illustrate how restoration and reclamation efforts apply an ecological and/or physiological concept. Students discuss the extent to which land restoration has depended on scientific predictions vs. trial and error to develop cultural practices. The other half of the course provides students with and in-depth view of the restoration of specific kinds of ecological communities. For
each ecommunity, students are provided with information on the history of restoration, the impetus for restorations (cultural, political),
and the range of restoration practices and desired outcomes, and major limitations to success. Field visits are scheduled for the first
half of the course.

**Style:** 60% Lecture, 20% Discussion, 20% Laboratory.

**Grading:** 30% mid exam, 40% final exam, 30% reports/papers.

**Exam Format:** MC and essay

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**Hort 5090 Directed Studies**

1-6 credit(s), max credits 18, 18 completions allowed;

**Instructor:** STAFF

**Description:** Opportunities for in-depth exploration of concepts, technology, materials, or programs in specific areas to expand
professional competency and self-confidence. Planning, organizing, implementing, and evaluating knowledge obtained from formal
education and experience.

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**Hort 6002 Problem Solving in Horticulture**

S-N only, 2-4 credit(s), max credits 4, 1 completion allowed;

**Instructor:** Anderson, Neil O.

**Description:** This course is a collaborative problem-solving experience, designed and completed by the students with guidance from a
faculty instructor. The purpose is to expose students to real-world problems in horticulture, have them identify the main biological,
design and social and business sustainability issues related to the problems, and to develop solutions as an interdisciplinary team of 2-
4 scholars to address these problems. Students will identify a research problem in consultation with the faculty and a public or private
sector organization involved in a facet of horticulture. Enrolled students will apply principles and methodologies they learned from
coursework and their prior professional experience to address the problem. This may involve a mix of empirical research methods from
horticulture and other natural and social sciences, design and business analyses, as well as concepts and methods of societal
deliberation and policy analysis

**Style:** 15% Lecture, 35% Discussion, 25% Small Group Activities, 10% Student Presentation.

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**Hort 6003 Masters of Professional Studies in Horticulture Professional Experience Program: Internship**

S-N only, 1-3 credit(s), max credits 6;

**Instructor:** Michaels, Thomas E

**Description:** Student may contact the instructor or department for information.

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**Hort 6011 Plant Propagation**

A-F only, 4 credit(s);

**Instructor:** Michaels, Thomas E

**Description:** Hort 6011 Plant Propagation is targeted primarily toward students entering or preparing to enter the Master of
Professional Studies in Horticulture who wish to earn graduate credits. Students are co-mingled with students in Hort 1001 Plant
Propagation and are required to complete the same lecture and laboratory assignments and exams as students in Hort 1001. In
addition, students in Hort 6011 will also participate in a discussion section that meets on alternate Tuesdays from 4:30pm to 6pm,
location to be announced, in which we review recent and classic scientific literature that pertains to the topics covered in lecture and
lab. Discussion leadership will rotate among the students. Some discussion sections will focus on career planning. For additional
information about lecture and lab format and content please see the course guide for Hort 1001.

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**Hort 8007 Extension Horticulture Practicum**

1-5 credit(s), max credits 5, 1 completion allowed;

**Instructor:** Smith, Alan G

**Description:** Student may contact the instructor or department for information.

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**Hort 8090 Graduate Horticultural Research**

1-12 credit(s), max credits 18, 18 completions allowed;

**Instructor:** Smith, Alan G

**Description:** Student may contact the instructor or department for information.

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**Hort 8270 Graduate Seminar**

A-F only, 1 credit(s); Grad major in [hort or applied plant sciences or ent or agro or plnt brdg or plnt path or soil] or instr
consent

**Description:** Credit will not be granted if credit has been received for: AGRO 8270;

**Instructor:** Wyse, Donald L

**Description:** Student may contact the instructor or department for information.

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### Housing Studies 240 McNeal Hall

**Hsg 2196 Work Experience in Housing Studies**
- S-N only, 1-4 credit(s), max credits 8;
- **Instructor:** Ziebarth PhD, Ann
- **Description:** Student may contact the instructor or department for information.

**Hsg 2196 Work Experience in Housing Studies**
- S-N only, 1-4 credit(s), max credits 8;
- **Instructor:** Angell, William J
- **Description:** Student may contact the instructor or department for information.

**Hsg 2196 Work Experience in Housing Studies**
- S-N only, 1-4 credit(s), max credits 8;
- **Instructor:** Crump, Jeffrey R
- **Description:** Student may contact the instructor or department for information.

**Hsg 2196 Work Experience in Housing Studies**
- S-N only, 1-4 credit(s), max credits 8;
- **Instructor:** Bruin, Marilyn J
- **Description:** Student may contact the instructor or department for information.

**Hsg 2401 Introduction to Housing**
- A-F only, 3 credit(s);
- **Instructor:** Ziebarth PhD, Ann
- **Description:** Housing is more than "protection from the elements". House and home have social, economic and psychological implications. This course is designed to develop an understanding of and appreciation for the complexity of housing. The goal is to familiarize you with housing as a process and a product in the context of the individual, the family, and the community. Topics addressed include: an introduction to housing studies, architectural styles and preferences, residential construction methods and components, housing finance (buying a home), housing markets, social and psychological aspects of home, and government laws, policies, and regulations. This course is designed for undergraduates, but is open to anyone. Students who are Housing Studies majors and those seeking a minor in Housing Studies are required to complete this course as part of the program core. The course will be web enhanced with a web Vista page that is available to registered students.
- **Style:** 75% Lecture, 20% Discussion. 5% in-class activities
- **Grading:** 15% mid exam, 50% written homework, 15% additional semester exams, 20% class participation. There are four homework assignments, two exams, and in-class participation points.
- **Exam Format:** essay, short answer, some multiple choice, problem solving

**Hsg 2463 Housing and Community Development**
- A-F only, 3 credit(s);
- **Instructor:** Crump, Jeffrey R
- **Description:** This course is an examination of the linkages between housing and community development. The process of residential neighborhood change and the impact of housing on neighborhood conditions will also be explored. The course considers theories of neighborhood change, trends in residential development, and ideas of community building. Private sector, community-based, and governmental efforts at neighborhood revitalization and their effectiveness will be studied. Related issues such as racial discrimination in housing, gentrification and the displacement of low-income residents will be surveyed. This course also incorporates a community-based learning component. Specific course goals include: 1. Develop an understanding of linkages between housing and the broader community. 2. Develop an appreciation of the linkages between housing and quality of life. 3. Develop an awareness of the connections between housing and social justice.
- **Style:** 40% Lecture, 20% Discussion. Community based learning
- **Grading:** 20% final exam, 30% quizzes, 10% class participation, 40% other evaluation. Community based learning
- **Exam Format:** Essay

**Hsg 3482 Sustainable Housing: Community, Environment, and Technology**
- A-F only, 3 credit(s);
- **Instructor:** Seavey, Robert Thomas
- **Description:** Perhaps you've noticed the high tech house on campus across from the Bell Museum. Will all housing be built with
similar technologies in the future? Should it? Perhaps you've been in a neighborhood and wondered whether the residents ever see each other. How do housing practices and the choices we make about housing resources affect a sense of community? And what about the new and incredibly efficient but expensive LED light bulbs: are they worth it? As population continues to grow and as environmental issues become more pressing, it has become increasingly clear that some housing practices and technologies are more sustainable than others, and in this course you will learn about the challenges and choices we all face in creating and maintaining housing. Historically, we have mostly allowed people to do what they want on their own property, and to build without much thought to how natural events impact communities, but does this freedom carry an unsustainable cost to the surrounding environment, and to our communities? Housing is a basic necessity, and the knowledge you gain in this course is something you will use for the rest of your life.

**Hsg 4160H Honors Capstone Project**
- **A-F only, 2 credit(s), max credits 4**
- **Instructor:** Ziebarth PhD, Ann
- **Description:** Student may contact the instructor or department for information.

**Hsg 4160H Honors Capstone Project**
- **A-F only, 2 credit(s), max credits 4**
- **Instructor:** Angell, William J
- **Description:** Student may contact the instructor or department for information.

**Hsg 4160H Honors Capstone Project**
- **A-F only, 2 credit(s), max credits 4**
- **Instructor:** Crump, Jeffrey R
- **Description:** Student may contact the instructor or department for information.

**Hsg 4193 Directed Study in Housing Studies**
- **A-F only, 1-4 credit(s), max credits 8**
- **Instructor:** Ziebarth PhD, Ann
- **Description:** Student may contact the instructor or department for information.

**Hsg 4193 Directed Study in Housing Studies**
- **A-F only, 1-4 credit(s), max credits 8**
- **Instructor:** Angell, William J
- **Description:** Student may contact the instructor or department for information.

**Hsg 4193 Directed Study in Housing Studies**
- **A-F only, 1-4 credit(s), max credits 8**
- **Instructor:** Crump, Jeffrey R
- **Description:** Student may contact the instructor or department for information.

**Hsg 4193 Directed Study in Housing Studies**
- **A-F only, 1-4 credit(s), max credits 8**
- **Instructor:** Bruin, Marilyn J
- **Description:** Student may contact the instructor or department for information.

**Hsg 4196 Internship in Housing Studies**
- **S-N only, 1-4 credit(s), max credits 4, 1 completion allowed**
- **Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent**
- **Credit will not be granted if credit already received for: DHA 4196Credit will not be granted if credit has been received for: ADES 4196**
- **Instructor:** Ziebarth PhD, Ann
- **Description:** Student may contact the instructor or department for information.
Hsg 4196 Internship in Housing Studies  
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent credit will not be granted if credit already received for: DHA 4196 Credit will not be granted if credit has been received for: ADES 4196;  
Instructor: Angell, William J  
Description: Student may contact the instructor or department for information.

Hsg 4196 Internship in Housing Studies  
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent credit will not be granted if credit already received for: DHA 4196 Credit will not be granted if credit has been received for: ADES 4196;  
Instructor: Crump, Jeffrey R  
Description: Student may contact the instructor or department for information.

Hsg 4196 Internship in Housing Studies  
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent credit will not be granted if credit already received for: DHA 4196 Credit will not be granted if credit has been received for: ADES 4196;  
Instructor: Bruin, Marilyn J  
Description: Student may contact the instructor or department for information.

Hsg 4467W Housing and the Social Environment  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Yust, Becky L  
Description: Why do households differ in what housing they can afford, where they want to live, the types of housing that appeal to them, and how their needs change over their lives? This course explores these issues from the perspective of the household members within our social system and the constraints that keep them from achieving the housing that they consider appropriate for them. With an emphasis on the special needs, for example, of elderly persons, minorities, large families, female-headed households, and low-income households, the course is intended to challenge students to develop their own ideas about housing and requires research work, data interpretation, and independent thinking. The assignments are flexible enough to permit students to use the strength of their individual backgrounds and interests to advantage in the class. For example, if you have experience in some specific aspect of housing or with a particular type of household, you will be able to focus on those aspects about which you are knowledgeable and explore them in more depth. There are two major projects in the class. One, a paper (about 15 pages), builds from assignments during the semester to analyze the characteristics and needs of a type of household, the constraints they face in finding housing, and options available to satisfy their housing needs. The second major project is a survey of residents who live in a multifamily housing development in the Twin Cities. Using the research techniques of post-occupancy evaluation, students tour the site (transportation provided), do site observations, create a questionnaire for distribution to the residents, analyze the data, and summarize the results. Through these two projects, students are equipped to understand housing needs of households and how programs and policies can work to support their needs.  
Style: 70% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation.  
Grading: 25% mid exam, 13% final exam, 44% reports/papers, 6% in-class presentation, 12% class participation.  
Exam Format: multiple choice

Hsg 5193 Directed Study in Housing Studies  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Ziebarth PhD, Ann  
Description: Student may contact the instructor or department for information.

Hsg 5193 Directed Study in Housing Studies  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Angell, William J  
Description: Student may contact the instructor or department for information.

Hsg 5193 Directed Study in Housing Studies  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Crump, Jeffrey R
Description: Student may contact the instructor or department for information.

**Hsg 5193 Directed Study in Housing Studies**
- A-F only, 1-4 credit(s), max credits 8;
- Instructor: Bruin, Marilyn J
- Description: Student may contact the instructor or department for information.

**Hsg 5467 Housing and the Social Environment**
- A-F only, 4 credit(s);
- Instructor: Yust, Becky L
- Description: Why do households differ in what housing they can afford, where they want to live, the types of housing that appeal to them, and how their needs change over their lives? This course explores these issues from the perspective of the household members within our social system and the constraints that keep them from achieving the housing that they consider appropriate for them. With an emphasis on the special needs, for example, of elderly persons, minorities, large families, female-headed households, and low-income households, the course is intended to challenge students to develop their own ideas about housing and requires research work, data interpretation, and independent thinking. The assignments are flexible enough to permit students to use the strength of their individual backgrounds and interests to advantage in the class. For example, if you have experience in some specific aspect of housing or with a particular type of household, you will be able to focus on those aspects about which you are knowledgeable and explore them in more depth. There are two major projects in the class. One, a paper (about 15 pages), builds from assignments during the semester to analyze the characteristics and needs of a type of household, the constraints they face in finding housing, and the options available to satisfy their housing needs. The second major project is a survey of residents who live in a multifamily housing development in the Twin Cities. Using the research techniques of post-occupancy evaluation, students tour the site (transportation provided), do site observations, create a questionnaire for distribution to the residents, analyze the data, and summarize the results. Through these two projects, students are equipped to understand housing needs of households and how programs and policies can work to support their needs.
- Style: 70% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation.
- Grading: 25% mid exam, 13% final exam, 44% reports/papers, 6% in-class presentation, 12% class participation.
- Exam Format: multiple choice

**Hsg 8192 Readings in Housing Studies**
- A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
- Instructor: Ziebarth PhD, Ann
- Description: Student may contact the instructor or department for information.

**Hsg 8192 Readings in Housing Studies**
- A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
- Instructor: Angell, William J
- Description: Student may contact the instructor or department for information.

**Hsg 8192 Readings in Housing Studies**
- A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
- Instructor: Crump, Jeffrey R
- Description: Student may contact the instructor or department for information.

**Hsg 8192 Readings in Housing Studies**
- A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
- Instructor: Bruin, Marilyn J
- Description: Student may contact the instructor or department for information.

**Hsg 8193 Directed Study**
- A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
- Instructor: Ziebarth PhD, Ann
- Description: Student may contact the instructor or department for information.

**Hsg 8193 Directed Study**
- A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
- Instructor: Angell, William J
- Description: Student may contact the instructor or department for information.
Hsg 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Crump, Jeffrey R
Description: Student may contact the instructor or department for information.

Hsg 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Bruin, Marilyn J
Description: Student may contact the instructor or department for information.

Hsg 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Ziebarth PhD, Ann
Description: Student may contact the instructor or department for information.

Hsg 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Angell, William J
Description: Student may contact the instructor or department for information.

Hsg 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Crump, Jeffrey R
Description: Student may contact the instructor or department for information.

Hsg 8222 Plan B Master's Project
S-N only, 3 credit(s);
Instructor: Bruin, Marilyn J
Description: Student may contact the instructor or department for information.

Hsg 8463 Housing: Race and Class
A-F only, 3 credit(s);
Instructor: Crump, Jeffrey R
Description: Student may contact the instructor or department for information.

Human Factors  240 McNeal Hall

HumF 5001 Foundations of Human Factors/Ergonomics
A-F only, 3 credit(s); Enrollment in good standing, grad HumF minor Credit will not be granted if credit has been received for: KIN 5001;
Instructor: Smith, Thomas J
Description: The course will address these issues in the following contexts: Consumer Product Design; Cognitive Performance and Learning, Psychomotor Performance, Behavioral Cybernetics of Human Performance; Effects of Perturbed Sensory Feedback on Performance; Machine and Tool Performance; Interactive Performance with Complex Technological Systems (Human/Computer; Human/Robot); Occupational Performance and Safety; Social and Team Performance; Organizational Performance; and Performance of Complex Sociotechnical Systems (Aerospace, Educational, Manufacturing, Transportation, Community and Health Systems. Field tours of selected private sector operations are provided to complement classroom activities. Course assignments encompass a series of class presentations, reports, and term projects dealing with HF/E analyses of consumer product design, design of complex sociotechnical systems and job/workplace design features and issues. The course represents the core course in the campus-wide, interdisciplinary Human Factors Minor Program, and is intended for graduate and upper-level undergraduate students with an interest in the conceptual and practical aspects of HF/E science.
Style: 40% Lecture, 10% Discussion. student team presentations & field trips

HumF 5211 Human Factors and Work Analysis
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: IE 5511;
Instructor: Harder, Kathleen A.
Description: Student may contact the instructor or department for information.
HumF 8001 Special Topics: Human Factors/Ergonomics
2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Smith, Thomas J
Description: Student may contact the instructor or department for information.

Human Resources and Industrial Relations 3-300 Carlson School of Management

HRIR 3021 Human Resource Management and Industrial Relations
3 credit(s); ECON 1101, ECON 1102, PSY 1001 Credit will not be granted if credit has been received for: HRIR 8021;
Instructor: Benraouane, Sid A.
Description: Student may contact the instructor or department for information.

HRIR 3021 Human Resource Management and Industrial Relations
3 credit(s); ECON 1101, ECON 1102, PSY 1001 Credit will not be granted if credit has been received for: HRIR 8021;
Instructor: Falink, Amy
Description: Student may contact the instructor or department for information.

HRIR 3041 The Individual in the Organization
2 credit(s);
Instructor: Kim, Yeonka
Description: Student may contact the instructor or department for information.

HRIR 3042 The Individual and Organizational Performance
2 credit(s);
Instructor: STAFF
Description: Factors influencing group, team, and organizational performance. Examines systems that drive organizational success.
Topics include job design and organization structure, organization effectiveness measures, culture, group dynamics, teamwork; power and influence.

HRIR 3051 Compensation: Theory and Practice
2 credit(s);
Instructor: STAFF
Description: Introduction to compensation/reward programs in employing organizations. Theories of organizational/employee behavior
used in design/implementation of pay programs. Design, implementation, and evaluation of job evaluation, salary surveys, skill-based pay, merit-based pay, and other compensation programs.

HRIR 5000 Topics in Human Resources and Industrial Relations
2 credit(s), max credits 8, 4 completions allowed;
Instructor: Benraouane, Sid A.
Description: Student may contact the instructor or department for information.

HRIR 5000 Topics in Human Resources and Industrial Relations
2 credit(s), max credits 8, 4 completions allowed;
Instructor: Benraouane, Sid A.
Description: Course Description This course is designed to provide students with an opportunity to learn about negotiation strategies.
Managers and leaders in modern organizations are faced with a variety of settings, in which they have to develop a process of
negotiating with a variety of stakeholders: employees, suppliers, alliance partners, owners and investors, unions, and customers. While
with some partners managers are in direct negotiation, with other partners, managers engage in a subtle negotiation and indirect
bargaining. Through a variety of reading, text analysis, discussion and debate, our goal in this class is to understand the process and
the context of negotiation, while at the same time develop a negotiation competency that would allow us to use negotiation tactics
effectively. Course Format This course will be conducted entirely via Internet. The course is offered in an asynchronous mode, which
means that the reading, the questions and the discussion will be all posted online. No face to face meeting and no synchronous (real
time virtual) meeting. Requirements: Weekly online participation Between 600-900 words per week (40%). Final online quiz (30%).
Final project (A paper or a case analysis 6-8 pages) (30%).

HRIR 5000 Topics in Human Resources and Industrial Relations
2 credit(s), max credits 8, 4 completions allowed;
Instructor: Wanberg, David
HRIR 5022 Managing Diversity
2 credit(s);
Instructor: Leslie,Lisa
Description: Student may contact the instructor or department for information.

HRIR 5023 Employment and Labor Law for the HRIR Professional
A-F only, 2 credit(s);
Instructor: O'Toole,Carol Ann Berg
Description: This course covers the growing body of laws and their application to the workplace; human rights, equal employment opportunity, compensation and benefits, employee protection, and labor relations. Special issues (e.g., wrongful discharge, sexual harassment, defamation) are also discussed in the context of statute, case law, and their application to work settings.
Exam Format: True False, Multiple Choice, Short Answer

HRIR 5062 Personnel Economics
2 credit(s);
Instructor: Budd,John W.
Description: Student may contact the instructor or department for information.

HRIR 8001 Business Principles for the HRIR Professional
A-F only, 4 credit(s);
Instructor: Ben-Ner,Avner
Description: Student may contact the instructor or department for information.

HRIR 8011 Using Data and Metrics in Human Resources and Industrial Relations
4 credit(s);
Instructor: Manchester,Colleen Flaherty
Description: Student may contact the instructor or department for information.

HRIR 8023 International Human Resource Management
2 credit(s);
Instructor: Leslie,Lisa
Description: Student may contact the instructor or department for information.

HRIR 8031 Staffing, Training, and Development
4 credit(s);
Instructor: Glomb PhD,Theresa M
Description: Student may contact the instructor or department for information.

HRIR 8032 Staffing and Selection: Strategic and Operational Concerns
2 credit(s);
Instructor: Tubre,Travis
Description: Student may contact the instructor or department for information.

HRIR 8033 Employee Training: Creating a Learning Organization
2 credit(s);
Instructor: Tubre,Travis
Description: Student may contact the instructor or department for information.

HRIR 8044 Motivation and Work Behavior in Contemporary Organizations
2 credit(s);
Instructor: Glomb PhD,Theresa M
Description: Student may contact the instructor or department for information.

HRIR 8051 Compensation and Benefits
4 credit(s);
Instructor: Fossum,John A
**HRIR 8101 HRIR in Practice: Strategy, Execution, and Ethics**  
2 credit(s);  
Instructor: Benraouane, Sid A.  
Description: Student may contact the instructor or department for information.

**HRIR 8825 Research Practicum/Workshop**  
S-N only, 1 credit(s), max credits 4, 4 completions allowed;  
Instructor: Duffy, Michelle Kathleen  
Description: Student may contact the instructor or department for information.

### Humanities 831 Heller Hall

**Hum 1431 Introduction to Philosophy**  
A-F only, 3 credit(s), max credits 6; Meets CLE req of Arts/Humanities  
Instructor: Kostko, Aaron Thomas  
Description: Student may contact the instructor or department for information.

**Hum 1433 Introduction to Literature**  
A-F only, 3 credit(s), max credits 6; Meets CLE req of Literature  
Instructor: Nichols, Marcia Dawn  
Description: American Identities Course Description What makes a family? Is a family constituted through the blood or genetics? Or can mutual experience, support, struggle meld individuals into a family? What are the roles and responsibilities of the different members of a family? How does one's family mold and shape one's identity and views? In this class, we will explore these and other questions as we read and analyze works of literature and film. In particular, we will examine different perspectives on families and on the roles of fathers and mothers. Moreover, using different critical prisms, we will explore issues of race, class, gender and sexuality as they relate to family and parenting. During the semester, students will be expected to participate in class discussion, complete in-class writings, keep a reading journal, give 2 oral presentations, complete 4-5 short writing assignments, and complete 1 group project. Laptops: Many assignments will be online, so you will need internet access. Please bring your laptops to class. Pen and paper: Please bring these to every class *Books can be purchased at the UMR bookstore or online.  
**Grading:** This information will be provided in the course syllabus.

**Hum 1435 Introduction to History: Epidemics in History**  
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives  
Instructor: Ford, James Thomas  
Description: This course fulfills the Historical Perspectives Core and Global Perspectives Theme of UMR's Liberal Education requirements by examining five cases of genocide in the Middle East, Europe, Africa, and Southeast Asia. The goal is to familiarize students with terms, concepts, and theories used in the study of genocide and to explore some disturbing yet essential questions about humanity. In the process, Humanities 1435 acquaints students with history as a discipline; the course assessments require students to grapple with the use and limitations of primary sources, the development of a methodology, and the formation of an interpretation. Though rooted in history proper, the course is interdisciplinary and makes use of tools and theories from disciplines such as sociology, social psychology, geography, literature, forensic archeology, primatology, and biological anthropology. The class will consider not only the views of perpetrators and victims, but the perspectives of "third party" groups. Ultimately, the purpose of analyzing and interpreting these historical cases is to gain a degree of self-cognizance, a wider historical perspective, and a greater awareness of the world abroad. While the first week of instruction presents an overview of mass murder before the 20th century, the semester focuses on modern events: the Armenian Genocide (1915-1918), the Holocaust (1933-1945), the Cambodian Genocide (1975-1994), and Ethnic Cleansing and Genocide in the Former Yugoslavia (1992-1995). Each unit lasts two to three weeks and entails a short writing assignment, an online quiz, and in-class and forum discussions. Finally, students deliver an oral presentation on a particular theme from the course in lieu of a final exam at the end of the semester.  
**Grading:** 30% reports/papers, 35% quizzes, 15% in-class presentation, 20% class participation.

**Hum 1435 Introduction to History: Genocide**  
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives  
Instructor: Ford, James Thomas  
Description: This course examines the economic, social, cultural, political, and medical impact of epidemics throughout history. Humanities 1435 offers an opportunity not only to investigate the progress of medical science in the face of deadly diseases, especially the heroic story of "microbe hunters" who search for cures via science, technology, and human ingenuity; it also reflects upon the decisions that individuals and societies made in coping with or minimizing disease. Sometimes these decisions involved moral
dilemmas, but ultimately the battle between microbes and their human hosts is a tale of tragic loss of life, co-evolution, and scientific breakthroughs. Five modules or units form the course curriculum, each lasting two to three weeks and entailing a writing assignment, class or online discussion, and an online quiz. First, the class looks at the origin of epidemics in pre-historic times and the three pandemics of plague in history, most notably the Black Death of 14th-century Europe. Second, students examine the menace of smallpox, especially during the Spanish conquest of the New World and in colonial North America. Third, the class studies epidemics associated with the 19th and early 20th centuries such as cholera, yellow fever, and tuberculosis. Fourth, Humanities 1435 focuses on the Great Influenza of 1918, as well as its precursors and similar outbreaks of flu more recently. Fifth, pandemics of the contemporary world such as AIDS and SARS receive attention in the final weeks of the semester. In addition to the unit-specific course work, students deliver an oral presentation on a particular theme from the course in lieu of a final exam at the end of the semester. The course fulfills the Historical Perspectives Core and Global Perspectives Theme of UMR's Liberal Education. We root these epidemics in particular eras and cultural settings through written sources and audio-visual aids.

Hum 3441 Ethics in Medicine and Science
- A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics
- Instructor: Brewer, Cameron David
- Description: Student may contact the instructor or department for information.

Hum 3481 Technology and Society
- A-F only, 3 credit(s); Meets CLE req of Technology and Society
- Instructor: Nichols, Marcia Dawn
- Description: Student may contact the instructor or department for information.

Industrial Engineering

IE 4521 Statistics, Quality, and Reliability
- 4 credit(s);
- Instructor: Leder, Kevin Zox
- Description: Student may contact the instructor or department for information.

IE 5111 Systems Engineering I
- A-F only, 2 credit(s);
- Instructor: Monson, Robert James
- Description:

IE 5112 Introduction to Operations Research
- A-F only, 3 credit(s);
- Instructor: Ma, Shiqian
- Description: Student may contact the instructor or department for information.

IE 5511 Human Factors and Work Analysis
- A-F only, 4 credit(s); Upper div CSE or grad student Credit will not be granted if credit has been received for: HUMF 5211;
- Instructor: Harder, Kathleen A.
- Description: Student may contact the instructor or department for information.

IE 5513 Engineering Safety
- A-F only, 4 credit(s);
- Instructor: Chaplin, Jonathan
- Description: Occupational, health, and product safety. Standards, laws, and regulations. Hazards and their engineering control, including general principles, tools and machines, mechanics and structures, electrical safety, materials handling, fire safety, and chemicals. Human behavior and safety, procedures and training, warnings and instructions.
- Style: 100% Lecture.
- Grading: 22% mid exam, 31% final exam, 5% reports/papers, 10% quizzes, 22% written homework, 10% class participation.
IE 5531 Engineering Optimization I
4 credit(s);
Instructor: Carlsson, John Gunnar
Description: Student may contact the instructor or department for information.

IE 5541 Project Management
4 credit(s); Upper div or grad student Credit will not be granted if credit has been received for: IE 4541;
Instructor: Schaller, Robin E
Description: This course is specifically designed to provide a foundation in contemporary engineering project management as practiced in industry. Its overall objective is to instruct engineering students on internationally accepted tools and methodology pertinent to their own professional and personal experience. Both the technical and interpersonal aspects of project management are studied, including leadership and team development. A combination of lecture, homework, and a team project together with class participation and presentation are used in the practice and understanding of project management, enabling the student to effectively apply acquired knowledge and skills to their professional experience. For example, at the completion of this course students will be able to create project plans, status reports and results, and effectively communicate them to management and customers in formal and informal settings. Homework: students are required to complete an assortment of homework assignments including problem sets designed to reinforce their understanding of the various project management concepts covered in the course. Class contribution including project team participation is considered highly important and is monitored by the instructor throughout the semester. All students are expected to have read the assigned readings and cases, and contribute constructively to the class discussion. Team project: the team project required for IE 5541 is intended to provide an opportunity for students to practice project management tools and techniques studied in the course. It is expected that each project team deliver a useful product to a real customer while demonstrating good project management methodology and tools. Evaluation of the student will be accomplished as follows: 2 exams (midterm and final), homework, in-class contribution, and the team project including reports and presentation.
Style: 60% Lecture, 17% Discussion, 22% Small Group Activities, 1% Student Presentation.
Grading: 15% mid exam, 20% final exam, 5% reports/papers, 20% special projects, 5% written homework, 5% in-class presentation, 10% class participation, 20% problem solving.

IE 5541 Project Management
4 credit(s); Upper div or grad student Credit will not be granted if credit has been received for: IE 4541;
Instructor: Zhang, Zhi
Description: This course is specifically designed to provide a foundation in contemporary engineering project management as practiced in industry. Its overall objective is to instruct engineering students on internationally accepted tools and methodology pertinent to their own professional and personal experience. Both the technical and interpersonal aspects of project management are studied, including leadership and team development. A combination of lecture, homework, and a team project together with class participation and presentation are used in the practice and understanding of project management, enabling the student to effectively apply acquired knowledge and skills to their professional experience. For example, at the completion of this course students will be able to create project plans, status reports and results, and effectively communicate them to management and customers in formal and informal settings. Homework: students are required to complete an assortment of homework assignments including problem sets designed to reinforce their understanding of the various project management concepts covered in the course. Class contribution including project team participation is considered highly important and is monitored by the instructor throughout the semester. All students are expected to have read the assigned readings and cases, and contribute constructively to the class discussion. Team project: the team project required for IE 5541 is intended to provide an opportunity for students to practice project management tools and techniques studied in the course. It is expected that each project team deliver a useful product to a real customer while demonstrating good project management methodology and tools. Evaluation of the student will be accomplished as follows: 2 exams (midterm and final), homework, in-class contribution, and the team project including reports and presentation.
Style: 60% Lecture, 17% Discussion, 22% Small Group Activities, 1% Student Presentation.
Grading: 15% mid exam, 20% final exam, 5% reports/papers, 20% special projects, 5% written homework, 5% in-class presentation, 10% class participation, 20% problem solving.

IE 8532 Stochastic Processes and Queuing Systems
4 credit(s);
Instructor: Cooper, William L.
Description: Student may contact the instructor or department for information.

IE 8773 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Gupta, Diwakar
Description: Student may contact the instructor or department for information.
IE 8774 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Gupta, Diwakar
Description: Student may contact the instructor or department for information.

IE 8794 Industrial Engineering Research
1-6 credit(s), max credits 10, 10 completions allowed;
Instructor: Cooper, William L.
Description: Student may contact the instructor or department for information.

IE 8794 Industrial Engineering Research
1-6 credit(s), max credits 10, 10 completions allowed;
Instructor: Gupta, Diwakar
Description: Student may contact the instructor or department for information.

Information Networking  
20 Ruttan Hall

INet 3065 Computer Security for the Business Professional
3 credit(s);
Instructor: Estrem, LeAllan James
Description: Essential information for all computer users. . . with no bit/byte savvy required! Track down and repel malicious intruders! Real-world examples and exercises will set you quickly on the road to safe, secure, and ethical computer use. You will learn how to. . .
1. Configure your computer to be free of viruses and worms
2. Know if your computer is infected; eradicate malicious software
3. Choose antivirus software and firewalls
4. Set up a secure Web page
5. Identify fraudulent locations
6. Use social networking sites safely
7. Use computers and the Internet ethically
8. Configure a secure home wireless network
9. Respond to identity theft
Prerequisites: None. However, the student should have some computer and Internet experience.
In addition, if a student encounters an unfamiliar topic in class, the expectation is that the student will be resourceful and put in the time outside of class as necessary to master the concepts. Computing Resources Needed: Software--Microsoft Windows operating system, minimum Windows XP. Vista or 7 preferred. Apple and Linux work stations acceptable. Hardware--Laptop and minimum 2 GB RAM. 3 GB RAM, DVD player preferred.

INet 3101 C Programming: Language and Applications
A-F only, 2 credit(s);
Instructor: Langanki, Mark D
Description: The C programming language has a long history. C remains one of the most powerful languages available today and is at the foundation of many operating systems. This course covers past and present use of the C language, C syntax, libraries, memory management, File I/O (file and socket), modularity, ways other languages use C to interact with an operating system, debugging, and guidelines for how and where to use C instead of other languages. The course also provides an overall approach to software development that uses an adaptive model for well-designed and well-written code in any language--code that is elegant, powerful, and easy to understand. This model assists developers in logically breaking programs into "atomic" parts that can be built upon, modularized, and eventually easily tested when brought together in a program. The concept of "programming styles" will also be introduced, helping students decide which style will work best for them. Upon course completion, students will be able to - Code, compile and link C programs - Use and create C libraries - Debug C applications - Understand appropriate application of the C language.
Group assignments will use real-world examples of appropriate use of C. Hands-on exercises will start with writing some simple UNIX/Linux shell commands in C, and then move into larger programs. Linux-based Ubuntu (http://www.ubuntu.com) or Knoppix (http://www.knoppix.org) are the free downloadable operating systems of choice for the class, and are bootable from CD/DVD.

INet 3102 Web Infrastructure
A-F only, 2 credit(s);
Instructor: Norman, John G
Description: INet 3102 begins with an outline of resources required for any web-based software system, and then explores service offerings (compute, storage, queuing) and platforms (AWS, Google Apps, Heroku, and others). At completion, students will be able to identify, analyze, and combine the major service components of a web-based application. 1. Service protocols: demystification of HTTP and web services; 2. Compute as a service (on-demand CPU through virtualization); 3. Storage as a service: storage models and usage; 4. Metrics as a service: how are my systems doing?; 5. Back-of-the-envelope costs for a service-based architecture; 6. Queuing and e-mail as services; 7. Caching. Prerequisites: A good working knowledge of machine architecture and organization (CSci 2021) and C programming for the Java programmer (INet 3101) is required (though note that many of the code examples will be in Ruby, running in the Java-based JRuby environment). Computing Resources: Software: Windows (XP or later), Linux, or Apple OS/X (10.5 or later) with 2 GB RAM or more.
INet 4011 Network Administration
A-F only, 4 credit(s);
Instructor: Tymeson,Nathan Paul
Description: This course combines theory (lecture and expert guest speakers) and application (labs). Topics include network architecture, switching, routing, algorithms, protocols, infrastructure hardware, cable plant, security and network management.
Style: 33% Lecture, 41% Laboratory, 3% Small Group Activities, 6% Student Presentation, 7% Demonstration, 3% Guest Speakers, 7% Web Based.
Grading: 20% mid exam, 20% final exam, 10% quizzes, 10% written homework, 40% laboratory evaluation.

INet 4032 Storage Design and Administration
A-F only, 2 credit(s);
Instructor: Follstad,Carl
Description: In today's "data explosion," managing data presents a challenge for organizations of all sizes. Basics of data management -- storage, protection and encryption -- as well as advanced topics of disaster recovery and business continuity are presented. Lectures will leverage case studies of local companies and how they are architecting their operations in unconventional ways to manage and protect terabytes of data. Students will learn how to apply storage industry best practices to solve everyday IT and business problems. Legal issues regarding data storage and retention, cutting-edge data storage products emerging into mainstream use, and "personal" data management and protection will also be discussed.

INet 4041 Emerging Network Technologies and Applications
A-F only, 3 credit(s);
Instructor: Dunn,Lawrence
Description: Underlying theory. Driving needs (technological, business). Developing technology. Competing technologies. Lectures by guest expert speakers, case studies, labs.

INet 4153 Policy and Regulation: Effects on Global IT Infrastructure
A-F only, 3 credit(s);
Instructor: Vanden Heuvel,Daniel Noel
Description: Student may contact the instructor or department for information.

INet 4193 Directed Study
A-F only, 1-4 credit(s), max credits 12, 4 completions allowed;
Instructor: STAFF
Description: Independent project, topic arranged with and supervised by ITI faculty.

INet 4707 Practice of Database Systems
A-F only, 3 credit(s); CSci 4061, at least 45 cr completed; CSci majors contact CSci dept before registeringCredit will not be granted if credit has been received for: CSCI 5707;
Instructor: Splett,Katherine Anna
Description: Concepts, conceptual data models with case studies, common data manipulation languages, logical data models, database design, facilities for database security/integrity, applications.

INet 4709 Database Administration
A-F only, 2 credit(s);
Instructor: Onkka,Daniel Charles
Description: Learn database administration concepts and techniques, including installation requirements (hardware and software), internal database components (memory structures, processing rules), backup and recovery (application VS database, disaster recovery), data management (partitioning, indexing strategies), high availability (clustering, mirroring, replication), and capacity planning. To illustrate concepts and technologies, associated material for Oracle 11g and SQL Server 2008 products are covered. Database administration is at the epicenter of change within IT. A DBA works very closely with application teams on things like disaster recovery and capacity planning, with hardware OS systems support staff for performance tuning, and senior management for auditing, and policy development.
Style: 80% Lecture, 20% Discussion.
Grading: 25% mid exam, 30% special projects, 25% written homework, 15% in-class presentation. Mid-term questions are discussed in class, with in-depth written responded due during class period 5. Special project is a "Data Management Plan" as described in the syllabus.
IDSc 3001 Information Systems for Business Processes and Management
A-F only, 3 credit(s);
Instructor: Olson, Timothy Harold
Description: Student may contact the instructor or department for information.

IDSc 3001 Information Systems for Business Processes and Management
A-F only, 3 credit(s);
Instructor: Ren, Yuqing
Description: Student may contact the instructor or department for information.

IDSc 3001H Honors: Information Systems for Business Processes and Management
A-F only, 3 credit(s);
Instructor: Ren, Yuqing
Description: Student may contact the instructor or department for information.

IDSc 3101 Introduction to Programming
A-F only, 2 credit(s);
Instructor: Umyarov, Akhmed
Description: Student may contact the instructor or department for information.

IDSc 3102 Intermediate Programming
A-F only, 2 credit(s);
Instructor: Ghoshal, Abhijeet
Description: Student may contact the instructor or department for information.

IDSc 3103 Data Modeling and Databases
A-F only, 2 credit(s);
Instructor: Umyarov, Akhmed
Description: Student may contact the instructor or department for information.

IDSc 3104 Enterprise Systems
A-F only, 2 credit(s);
Instructor: Fiedler, Corrinne (Corrie)
Description: Student may contact the instructor or department for information.

IDSc 3202 Analysis and Modeling for Business Systems Development
A-F only, 4 credit(s);
Instructor: Fiedler, Corrinne (Corrie)
Description: Improving business processes has become a key business strategy: always driving toward faster, cheaper, more reliable processes. A key role in these improvement efforts is that of the Business Analyst: the person who bridges the gap of understanding between the business needs and the technologists (designers and programmers). IDSc 3202 emphasizes the science and the art of converting ambiguous and contradictory business concepts into business process models. These models must, of course, be correct, but also precise enough to be implemented. Over the semester, we study critical business analyst skills: evaluating current processes, recommending strategic solutions, working with business stakeholders to clarify & document requirements, developing process and data models, and planning for the human side of change. The class covers critical skills for those with career goals in any process-oriented role in today's enterprises, including business analyst, supply chain manager, operations manager, finance manager, MIS manager, project manager. The course includes hands-on experience with process modeling (Microsoft Visio), project management (Microsoft Project), and data base (Microsoft Access) tools.
Style: 45% Lecture, 30% Discussion, 15% Small Group Activities, 5% Student Presentation, 5% Guest Speakers. Class time set aside weekly for team project work.
Grading: 20% mid exam, 10% final exam, 25% special projects, 30% written homework, 15% class participation.

IDSc 4204W Information Services Management
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Fiedler, Corrinne (Corrie)
Description: Student may contact the instructor or department for information.
IDSc 4204W Information Services Management  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Ghoshal, Abhijeet  
Description: Student may contact the instructor or department for information.

IDSc 4301 Information Systems Capstone Course: A Live Case  
A-F only, 2 credit(s);  
Instructor: Olson, Timothy Harold  
Description: Student may contact the instructor or department for information.

IDSc 4411 Accounting Information Systems and IT Governance  
A-F only, 2 credit(s);  
Instructor: Schmidt, Matt  
Description: As organizations continue to be highly dependent on information technology, they are being challenged to build and maintain an internal control structure to manage IT risk to an acceptable level. Additionally, regulations such as Sarbanes-Oxley, GLBA, and HIPAA have increased the need for sound internal control and security management, coupled with audit oversight. This course provides the student with an in-depth look into the information technology audit function, internal control, the IT audit process, network security, the systems development life-cycle, compliance issues, IT governance, business continuity, and the various frameworks and methodologies. A series of lectures, case studies, and real world examples will be used to demonstrate this material.  
Style: 50% Lecture, 10% Film/Video, 20% Discussion, 5% Small Group Activities, 5% Demonstration, 10% Guest Speakers. Please note that percentages are estimates.  
Grading: 40% mid exam, 40% final exam, 20% special projects.

IDSc 4421 Financial Information Systems and Technologies  
A-F only, 2 credit(s);  
Instructor: Wagle, Mihir Shivkumar  
Description: Student may contact the instructor or department for information.

IDSc 4441 Electronic Commerce  
A-F only, 2 credit(s);  
Instructor: Gu, Zhuojun  
Description: Student may contact the instructor or department for information.

IDSc 4490 Information Systems Special Topics  
A-F only, 2 credit(s), max credits 10, 5 completions allowed;  
Instructor: Fiedler, Corrinne (Corrie)  
Description: Student may contact the instructor or department for information.

IDSc 6040 Information Technology Management  
A-F only, 2 credit(s);  
Instructor: Subramani, Mani R  
Description: Student may contact the instructor or department for information.

IDSc 6401 Decision Technologies  
A-F only, 2 credit(s);  
Instructor: Curley, Shawn P  
Description: The course provides an introduction to the business applications of information technologies that can aid business decision making. The course showcases how effective decision support systems can be developed using some of the newest
technologies. The focus is on web-based applications and on business-to-consumer applications. Recent examples include: expert systems, neural networks, genetic algorithms, geographic information systems, simulations, and yield management systems.

**Grading:** 55% reports/papers, 45% in-class presentation.

IDSc 6435 Business Process Excellence
A-F only, 2 credit(s);
Instructor: Nemani,Rao R
Description: Student may contact the instructor or department for information.

IDSc 6471 Knowledge Management
A-F only, 2 credit(s);
Instructor: Subramani,Mani R
Description: Student may contact the instructor or department for information.

IDSc 6481 Managerial Decision Making
A-F only, 2 credit(s);
Instructor: Curley,Shawn P
Description: This is not an IS course. The course is based on research in psychology and research in organizational theory to understand how decisions are made and when decisions fail. From this understanding, practical approaches and techniques for improving decision making are identified and, as appropriate, demonstrated. Although we use theory and achieve a working understanding of theory for our purposes, this is not a course in psychology or in organizational theory. It is a course in understanding the dynamics of decision making, towards the practical goal of improving decision making. Questions that frame the course include: - How are decisions made? What are the elements of a decision? Psychological and organizational theories form the bases of the frameworks employed. - How do decisions fail? What are some of the barriers to good decision making, or characteristics of how we make decisions, that can lead us astray? - Based on the above, what techniques have or can be identified for improving decision making in our organizations? Developing and evaluating such techniques are the ultimate goals of the course.

Style: 30% Lecture, 35% Discussion, 35% Small Group Activities.
Grading: 90% reports/papers, 10% class participation.

IDSc 6490 Advanced Topics in MIS
A-F only, 2 credit(s), max credits 10, 5 completions allowed;
Instructor: Ren,Yuqing
Description: Social media technologies have profoundly changed how we live, work, and do business. In recent years, many companies have launched social media strategies to leverage these technologies to better connect with customers, suppliers, and employees. Despite thousands to millions of dollars invested, success is not guaranteed. Why? What are the implications for you and your company? What opportunities and challenges do businesses face in innovation, collaboration, brand management, community building? In this course, we work together to answer these questions through a combination of readings, class and online discussion, cases analyses, and hands-on project. You will learn the concepts and principles related to new business models supported by innovative use of social media technologies such as blogs, wikis, and online social networks. You will also gain hands on experience with popular social media applications and platforms.

IDSc 8511 Conceptual Topics and Research Methods in Information and Decision Sciences
4 credit(s);
Instructor: Gupta,Alok
Description: Student may contact the instructor or department for information.

IDSc 8711 Cognitive Science
4 credit(s);
Instructor: Johnson,Paul E
Description: We increasingly perform tasks using knowledge that we individually do not possess. Decisions and the solution to problems are as likely to arise from the interaction among people (and among people and artifacts), as they are to result from the capacity of a single individual. The use of various physical, social and intellectual resources to perform tasks has given us many benefits. It has also given us the ability to act without reflection (the philosopher A. N. Whitehead observed that civilization advances by extending the number of things we can do without thinking about them). An interesting consequence of reliance on the knowledge and thinking of others is that our mental models often become divorced from reality. When this happens individuals as well as organizations sometimes act counter to their best interests. Such actions reflect characteristics of the human mind and how it is (and is not) adapted to the demands of modern twentieth century life and work. In this course we examine research and theory on the nature of the mind and how it functions in the modern world. Drawing on work in psychology, anthropology, philosophy and computer science we develop a framework for understanding the behavior of cognitive agents in various settings of work and daily life. We will be particularly
interested in the role of consciousness (including intentionality and narrative thinking), the nature of representation (including the idea of self organizing systems) and the limits of cognitive capacity (e.g., bounded rationality) as explanations for behavior. Data from the study of research problems in the field settings (health care, manufacturing, financial markets) as well as the laboratory will be critiqued and evaluated. Alternative methodologies for investigating behavior will be explored. Upon completion of the course students should be able to provide an informed critique of research as well as undertake the formulation of a research problem of modest scope using cognitive science theory and methodology. The course format will be lecture and discussion based on assigned readings from the research literature. Course requirements include a weekly synopsis of one assigned reading and a take-home final exam.

**Infrastructure Systems Engineering**  510 WBOB

ISE 5101 Project Management
- **A-F only, 3 credit(s);**
- **Instructor:** Smith, Karl Aldrich
- **Description:** Student may contact the instructor or department for information.

ISE 5113 Computer Applications in Infrastructure Systems Engineering
- **A-F only, 2 credit(s);**
- **Instructor:** Henry, Brad
- **Description:** Student may contact the instructor or department for information.

ISE 5500 Public Interactions
- **A-F only, 1 credit(s), max credits 2;**
- **Instructor:** Spack, Raymond Joseph
- **Description:** Student may contact the instructor or department for information.

ISE 5503 Financial Management in Public Organizations
- **A-F only, 2 credit(s);**
- **Instructor:** Nagel, Mark E
- **Description:** Student may contact the instructor or department for information.

ISE 5504 Construction Law and Ethics
- **A-F only, 2 credit(s);**
- **Instructor:** Mackay, Deborah
- **Description:** Student may contact the instructor or department for information.

ISE 8105 Capstone Project
- **A-F only, 1-2 credit(s), max credits 3;**
- **Instructor:** Voller, Vaughan Richard
- **Description:** Student may contact the instructor or department for information.

**Innovation Studies**  20 Ruttan Hall

IS 5001 Introduction to Innovation Studies
- **A-F only, 1-4 credit(s), max credits 4, 3 completions allowed;**
- **Instructor:** Tomsyck, John Peter
- **Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Presents key Innovation Studies models and demonstrates how these models support individualized learning and leadership processes while being broadly based dynamic and collaborative. The models contribute to innovative self and team leadership strategies, define and apply just-in-time knowledge, and support lifelong self-improvement skills.
- **Style:** 100% Web Based.
- **Grading:** 40% reports/papers. -Discussion posts on readings (12%) -Research and discussions on Web sites (12%) -10 innovation simulations (10%) -12 skills exercises (12%) -14 evaluations (14%)

IS 5002 Final Project for Innovation Studies
- **A-F only, 1-4 credit(s), max credits 4, 4 completions allowed;**
- **Instructor:** Harkins, Arthur M
- **Description:** The Final Project must have an applied, field-based dimension, and may be undertaken in one of two ways: (1) as an
Internship in an organization such as a business, school, government agency, nonprofit or community group, or (2) as a hands-on study project that sheds light on a contemporary issue or problem. Section 001 is for initial preparation of the Final Project.

**IS 5100 Innovation Studies Seminar: Leadership and Change in an Innovation Society**

**A-F only, 3 credit(s), max credits 24, 24 completions allowed;**

**Instructor:** Crosby, Barbara C

**Description:** Change is often built into definitions of leadership, and certainly many scholars and practitioners have written about how leaders can foster change in their organizations or communities. Moreover, understanding the links between leadership and change takes on increased urgency as the United States and other countries strive to foster an “innovation economy” and navigate through complex, turbulent political terrain. Leaders will need conceptual tools and practical skills to promote innovative organizations that thrive in and contribute to an innovative society. Accordingly, this seminar will examine models of change and models of leadership and investigate how leaders can promote desirable personal, organizational and societal change. Case studies and action research will be emphasized. An important class product will be a framework for leadership and change in an innovation society. During each class session, one or two learners will be responsible for recording “takeaways” from the evening’s conversation. When participants complete this course, they will have knowledge, skills, wisdom, and motivation that enable them to practice personal, team, organizational and societal leadership aimed at innovation for the common good.

**Grading:** 35% reports/papers, 25% reflection paper, 30% class participation, 10% other evaluation.

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**Insurance and Risk Management 3-122 Carlson School of Management**

**Ins 4100 Corporate Risk Management**

**2 credit(s);**

**Instructor:** Whitman, Andrew Franklin

**Description:** Theory applied to Enterprise Risk Management (ERM) practice. Guest industry practitioners demonstrate as students learn how to apply the risk management process of identifying, assessing, controlling, financing and monitoring risks from all sources to increase value to all stakeholders. Risk managing cash flow, human resources, intellectual and tangible property, liability, and worker's compensation by application of risk control and risk financing tools, including insurance. Students learn to serve as consultants in teams presenting the risk management process to a live client company.

**Ins 4101 Employee Benefits**

**2 credit(s);**

**Instructor:** STAFF

**Description:** Design/administration of employee benefit plans as a component of total compensation: health insurance, disability plans, life insurance, salary reduction/deferred compensation programs/retirement plans--from social insurance to executive benefits. Alternative funding methods, including, self-insurance. Ethical issues, legal liability, compliance with regulations. Students learn to serve as consultants applying employee benefits to a live company. Practicing professionals and faculty address the class and assist students.

**Style:** 70% Lecture, 15% Discussion, 15% Student Presentation.

**Grading:** 15% reports/papers, 50% quizzes, 20% in-class presentation, 15% class participation.

**Exam Format:** multiple choice and essay

**Ins 4200 Insurance Theory and Practice**

**2 credit(s);**

**Instructor:** Whitman, Andrew Franklin

**Description:** An introduction to insurance theory and practice and to careers of actuary, corporate risk manager, insurance agent/broker/consultant, underwriter, and loss adjuster. Types of insurance: liability, crime, workers’ compensation, and property insurance. Insurance practices of pricing, marketing, underwriting, and claims administration. These functions are applicable to all types of insurance and to self insurance in large organization. Life and health insurance; they are covered in Ins 4101 & Ins 4201.

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**Integrated Behavioral Health 20 Ruttan Hall**

**IBH 6021 Methods and Models III: Relapse Prevention, Risk Reduction & Recovery Maintenance**

**A-F only, 2 credit(s);**

**Instructor:** Desanto, Paula Louise

**Description:** Student may contact the instructor or department for information.

**IBH 6041 Advanced Cognitive Therapies for Trauma**

**A-F only, 2 credit(s);**
IBH 6051 Advanced Group Practice  
A-F only, 2 credit(s);  
**Instructor:** Sutherland, Roy J  
**Description:** Student may contact the instructor or department for information.

IBH 6061 Advanced Diagnostic Assessment  
A-F only, 3 credit(s);  
**Instructor:** Frenz, David Arthur  
**Description:** Student may contact the instructor or department for information.

IBH 6081 Human Lifespan Development and Behavioral Health  
A-F only, 2 credit(s);  
**Instructor:** Wamsley, Debra S  
**Description:** Student may contact the instructor or department for information.

IBH 6101 Family Dynamics and Therapy  
A-F only, 3 credit(s);  
**Instructor:** Becher-Ingwalson, Ann M  
**Description:** Student may contact the instructor or department for information.

IBH 6993 Directed Study in Integrated Behavioral Health  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
**Instructor:** Rohovit, Julie L  
**Description:** Student may contact the instructor or department for information.

**Inter-College Program**  
20 Ruttan Hall

ICP 3093 Directed Study  
1-15 credit(s), max credits 15, 1 completion allowed;  
**Instructor:** STAFF  
**Description:**

ICP 3201 Career and Internship Preparation  
A-F only, 1 credit(s);  
**Instructor:** Okstad, Brian Clay  
**Description:** This class is ideal for undergraduate students who are confident they're in the right major and want to begin seeking jobs and internships related to their career goals. Career and Internship Preparation will walk you through the internship or job search process step by step to help you feel more confident in your ability to secure positions in your industry area. Through in-class presentations and activities, you will identify your top skills/strengths and learn how to market these qualities through cover letters, resumes, portfolios and job interviews. Additionally, you will learn the best resources and strategies for finding job openings in your field. Students will also have several opportunities to get advice and insight from industry professionals. Note: If you are still uncertain about your career plans or questioning your major, CFAN 1201, Discovering Majors and Careers, may be a more appropriate course.  
**Style:** You can expect a combination of interactive lectures, small-group workshops, individual activities, and guest speakers.  
**Grading:** 22% reports/papers, 54% special projects, 13% attendance, 11% reflection paper. There will be no exams. The projects and two brief papers are designed to highlight your skills and to help you learn about careers and job-seeking in your field.

ICP 3201 Career and Internship Preparation  
A-F only, 1 credit(s);  
**Instructor:** Hanson, Matthew R  
**Description:** Student may contact the instructor or department for information.

ICP 3201 Career and Internship Preparation  
A-F only, 1 credit(s);  
**Instructor:** Hinz, Katy Irene  
**Description:** Student may contact the instructor or department for information.
ICP 3201 Career and Internship Preparation
A-F only, 1 credit(s);
Instructor: Giefer, Christine M
Description: This course is designed to introduce students to the career development journey. By taking a proactive approach to identifying and achieving their career goals, students will gain confidence in the job-search world and be able to position themselves to succeed. This course will focus on: -Self-assessment -Skills, values and goal setting -Job searching techniques -Resume writing, cover letters, portfolios and other job-search tools -Networking -Interviewing -Professionlism

Interdepartmental Study 411 (STSS) Science Teaching Student Services

ID 1201 Major and Career Exploration
2 credit(s);
Instructor: Bolte, Mia M
Description: Are you undecided about which major to choose? Or are you wondering what careers you can pursue with your major? In this class you'll learn about the foundations of career planning in relation to your interests. The course covers two main subjects: * Self-Assessment: Learn more about your skills, values, interests, and personality. * Exploring Options: Learn about majors available at the U, and how you can use your major to find a career you'll enjoy. We'll also introduce you to many of the resources available on campus, and help you explore the ways internships, community service, work experience, and travel can impact your future success. A $30 fee will be charged for career assessment inventories. Grading/Workload: Grades are determined based on student participation in class, 3-4 papers/projects, and other reaction papers as determined by the instructor. There are no exams in this course. An average of 25 pages of reading will be required each week.

ID 1201 Major and Career Exploration
2 credit(s);
Instructor: Untiedt PhD, LP, Stephanie Ann
Description: Student may contact the instructor or department for information.

ID 1201 Major and Career Exploration
2 credit(s);
Instructor: Timmins, Paul
Description: Are you undecided about which major to choose? Or are you wondering what careers you can pursue with your major? In this class you'll learn about the foundations of career planning in relation to your interests. The course covers two main subjects: * Self-Assessment: Learn more about your skills, values, interests, and personality. * Exploring Options: Learn about majors available at the U, and how you can use your major to find a career you'll enjoy. We'll also introduce you to many of the resources available on campus, and help you explore the ways internships, community service, work experience, and travel can impact your future success. A $30 fee will be charged for career assessment inventories. Grading/Workload: Grades are determined based on student participation in class, 3-4 papers/projects, and other reaction papers as determined by the instructor. There are no exams in this course. An average of 25 pages of reading will be required each week.

ID 1201 Major and Career Exploration
2 credit(s);
Instructor: Buckley, Christopher Gene
Description: Are you undecided about which major to choose? Or are you wondering what careers you can pursue with your major? In this class you'll learn about the foundations of career planning in relation to your interests. The course covers two main subjects: * Self-Assessment: Learn more about your skills, values, interests, and personality. * Exploring Options: Learn about majors available at the U, and how you can use your major to find a career you'll enjoy. We'll also introduce you to many of the resources available on campus, and help you explore the ways internships, community service, work experience, and travel can impact your future success. A $30 fee will be charged for career assessment inventories. Grading/Workload: Grades are determined based on student participation in class, 3-4 papers/projects, and other reaction papers as determined by the instructor. There are no exams in this course. An average of 25 pages of reading will be required each week.

ID 1201 Major and Career Exploration
2 credit(s);
Instructor: Halverson, Joyce A
Description: Are you undecided about which major to choose? Or are you wondering what careers you can pursue with your major? In this class you'll learn about the foundations of career planning in relation to your interests. The course covers two main subjects: * Self-Assessment: Learn more about your skills, values, interests, and personality. * Exploring Options: Learn about majors available at the U, and how you can use your major to find a career you'll enjoy. We'll also introduce you to many of the resources available on
ID 3201 Career Planning
2 credit(s);
Instructor: Untiedt PhD,LP,Stephanie Ann
Description: Wondering what you'll do after graduation? This course provides a practical introduction to integrating career-search strategies with your talents, values, interests and experience. Emphasis is on understanding the marketplace, online research, strategic resume writing, networking, and interviewing. A $40 fee will be charged for career assessment inventories.
Grading/Workload: Grades are determined based on student participation in class, 3-4 papers/projects, and other reaction papers as determined by the instructor. There are no exams in this course. An average of 25 pages of reading will be required each week.

ID 3201 Career Planning
2 credit(s);
Instructor: Holschbach MA,Jesse
Description: Wondering what you'll do after graduation? This course provides a practical introduction to integrating career-search strategies with your talents, values, interests and experience. Emphasis is on understanding the marketplace, online research, strategic resume writing, networking, and interviewing. A $40 fee will be charged for career assessment inventories.
Grading/Workload: Grades are determined based on student participation in class, 3-4 papers/projects, and other reaction papers as determined by the instructor. There are no exams in this course. An average of 25 pages of reading will be required each week.

ID 3201 Career Planning
2 credit(s);
Instructor: Sturm,Chelsie J
Description: Student may contact the instructor or department for information.

ID 3208 Internship Reflection: Making Meaning of Your Experience
1 credit(s);
Instructor: Schmidt Whitney,Angie
Description: Student may contact the instructor or department for information.

ID 3571 HECUA: Inequality in America - Contested Theories of Poverty, Inequality, and Social Change
4 credit(s);Meets CLE req of Social Sciences
Instructor: Holliday,David Wallace
Description: In the Metro Urban Studies Term students activity delve into major challenges of our time: poverty, inequality and social change. Connecting these issues is at the core of the program. Instead of just learning about these problems in the classroom, students actively explore solutions and become engaged in organization committed to social transformation. This program focuses on learning the basics of organizing in communities and workplaces, how to persuade others to become critically engaged, and how to be an effective advocate for issues and people. Concurrent enrollment in ID 3572 and ID 3573 is required. Contact the Off-Campus Study Programs Office (612-626-2044 or 240 Appleby) for more information.

ID 3572 HECUA: Inequality in America - Social Policy and Anti-Poverty Strategies in Theory and Practice
4 credit(s);Meets CLE req of Diversity and Soc Justice US
Instructor: Holliday,David Wallace
Description: In the Metro Urban Studies Term students actively delve into major challenges of our time: poverty, inequality and social change. Connecting these issues is at the core of the program. Instead of just learning about these problems in the classroom, students actively explore solutions and become engaged in organization committed to social transformation. This program focuses on learning the basic of organizing in communities and workplaces, how to persuade others to become critically engaged, and how to be an effective advocate for issues and people. Concurrent enrollment in ID 3571 and ID 3573 is required. Contact the Off-Campus Study Programs Office (612-626-2044 or 240 Appleby) for more information.

ID 3573 HECUA: Inequality in America Internship Seminar
8 credit(s);Meets CLE req of Civic Life and Ethics
Instructor: Holliday,David Wallace
Description: In the Metro Urban Studies Term students actively delve into major challenges of our time: poverty, inequality and social change. Connecting these issues is at the core of the program. Instead of just learning about these problems in the classroom, students actively explore solutions and become engaged in organization committed to social transformation. This program focuses on
learning the basic of organizing in communities and workplaces, how to persuade others to become critically engaged, and how to be an effective advocate for issues and people. This is an 8-credit internship in the Twin Cities. Concurrent enrollment in ID 3571 and ID 3573 is required. Contact the Off-Campus Study Programs Office (612-626-2044 or 240 Appleby) for more information.

**ID 3591 HECUA Off-Campus Study Program: Environmental Sustainability: Adaptive Ecosystem Management**
- A-F only, 4 credit(s); Meets CLE req of Environment
- **Instructor:** Holliday, David Wallace
- **Description:** Students will gain a practical understanding of the ecological and physical processes that underlie environmental degradation. This course includes both classroom and field work. All majors are welcome! Concurrent registration in ID 3592, 3593, & 3594 is required. Contact the CCLC (612-626-2044) for more information.

**ID 3592 HECUA Off-Campus Study Program: Environmental Sustainability: Dimensions of Environmental Change**
- A-F only, 4 credit(s); Meets CLE req of Social Sciences
- **Instructor:** Holliday, David Wallace
- **Description:** All majors are welcome! Students explore how humans understand environmental sustainability, how current power dynamics and trends towards a global free market impact local efforts to promote sustainability, and how community and social movements are developing alternative visions of environmental sustainability. This course includes both classroom and field work. Concurrent registration in ID 3591, 3592, & 3594 is required. Contact the CCLC (612-626-2044) for more information.

**ID 3593 HECUA Off-Campus Study Program in Sustainability: Field Methods Research and Investigation**
- A-F only, 4 credit(s); Meets CLE req of Biological Sciences
- **Instructor:** Holliday, David Wallace
- **Description:** All majors are welcome! In this component of the program, students have an opportunity to work with scientists and community members to conduct publishable research. Concurrent registration in ID 3591, 3592, & 3594 is required. Contact the CCLC (612-626-2044) for more information.

**ID 3594 HECUA Off-Campus Study Program: Environmental Sustainability, Internship**
- A-F only, 4 credit(s); Meets CLE req of Civic Life and Ethics
- **Instructor:** Holliday, David Wallace
- **Description:** All majors are welcome! This 15-hour per week internship gives students an opportunity to interact and work with one of the most active networks of environmental organizations in the country. Concurrent registration in ID 3591, 3592, & 3593 is required. Contact the CCLC (612-626-2044) for more information.

**ID 3901 Scholars Program Capstone Seminar**
- A-F only, 1 credit(s);
- **Instructor:** Siems McKay, Monica
- **Description:** This one-credit seminar is designed to complement the Integrative Community Engagement Project (ICEP) as a capstone experience for you as a Community Engagement Scholar. The seminar will provide tools guidance, support, and structure to help you successfully complete your ICEP. It will also provide opportunities for you to reflect on how your previous academic and community work have informed your ICEP, and how your experiences will inform and help prepare you for the next, post-graduation phase of your life. The first half of the semester will be focused primarily on project support, and the final half of the semester will be focused on reflection. During our seminar meetings, we will use a variety of teaching and learning strategies to achieve the course objectives, including: workshop space to discuss projects with peers, small and large group discussions, interactive reflection activities, and short readings. A number of our class periods will be spent using a learning method called learning circles. Learning circles are a form of democratic education in which participants share stories about their experiences around a common theme to identify connections and insights about our work.

**ID 3901 Scholars Program Capstone Seminar**
- A-F only, 1 credit(s);
- **Instructor:** Hirt, Laurel Elizabeth
- **Description:** This one-credit seminar is designed to complement the Integrative Community Engagement Project (ICEP) as a capstone experience for you as a Community Engagement Scholar. The seminar will provide tools guidance, support, and structure to help you successfully complete your ICEP. It will also provide opportunities for you to reflect on how your previous academic and community work have informed your ICEP, and how your experiences will inform and help prepare you for the next, post-graduation phase of your life. The first half of the semester will be focused primarily on project support, and the final half of the semester will be focused on reflection. During our seminar meetings, we will use a variety of teaching and learning strategies to achieve the course objectives, including: workshop space to discuss projects with peers, small and large group discussions, interactive reflection activities, and short readings. A number of our class periods will be spent using a learning method called learning circles. Learning circles are a form of democratic education in which participants share stories about their experiences around a common theme to identify connections and insights about our work.
Insights about our work.

**ID 3993 Directed Study**
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: Hirt, Laurel Elizabeth
Description: Student may contact the instructor or department for information.

**ID 3993 Directed Study**
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: Timmins, Paul
Description: Student may contact the instructor or department for information.

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**Interior Design 240 McNeal Hall**

**IDes 1601 Interior Design Studio I**
A-F only, 4 credit(s);
Instructor: STAFF
Description: Introduction to theories used to solve interior design problems related to human behavior. Course based upon the design process and communication skills required of the interior design profession.
Style: 5% Lecture, 10% Discussion. studio
Grading: 10% quizzes, 5% class participation, 85% other evaluation. studio projects
Exam Format: short answer/essay

**IDes 2196 Work Experience in Interior Design**
S-N only, 1-4 credit(s), max credits 8;
Instructor: Hadjiyanni, Tasoulla
Description: Student may contact the instructor or department for information.

**IDes 2196 Work Experience in Interior Design**
S-N only, 1-4 credit(s), max credits 8;
Instructor: Martin, Caren Samter
Description: Student may contact the instructor or department for information.

**IDes 2196 Work Experience in Interior Design**
S-N only, 1-4 credit(s), max credits 8;
Instructor: Guerin, Denise A
Description: Student may contact the instructor or department for information.

**IDes 2196 Work Experience in Interior Design**
S-N only, 1-4 credit(s), max credits 8;
Instructor: Zollinger, Stephanie Watson
Description: Student may contact the instructor or department for information.

**IDes 2196 Work Experience in Interior Design**
S-N only, 1-4 credit(s), max credits 8;
Instructor: Asojo, Abimbola
Description: Student may contact the instructor or department for information.

**IDes 2603 Interior Design Studio III**
A-F only, 4 credit(s);
Instructor: STAFF
Description: Focus of the course is on presentation skills design of interior environment as influenced by neighborhood, adjacent structures, regional context and diverse cultures.
Style: 5% Lecture, 10% Discussion. studio
Grading: 95% other evaluation. studio projects

**IDes 2612 Interior Materials and Specifications**
A-F only, 4 credit(s); Meets CLE req of Environment
Instructor: Enz, Pamela Richie
Description: Student may contact the instructor or department for information.

IDes 2621 Computer Aided Design: Interior Design
A-F only, 4 credit(s);
Instructor: STAFF
Description: Application of two- and three-dimensional computer drawing in design/visualization of interior space. AutoCAD software used on a window-based system.
Style: 5% Lecture, 5% Discussion, 60% Laboratory. design problem solving
Grading: 10% quizzes, 5% class participation, 85% problem solving.
Exam Format: CAD exercises and short answer

IDes 3161 History of Interiors and Furnishings: Ancient to 1750
A-F only, 4 credit(s); Meets CLE req of Global Perspectives
Instructor: Zollinger, Stephanie Watson
Description: Study of European and American interiors and furnishings including furniture, textiles and decorative objects.
Style: 70% Lecture, 20% Discussion. small groups
Grading: 40% final exam, 10% reports/papers, 10% special projects, 35% quizzes, 5% class participation.
Exam Format: multiple choice, essay

IDes 3196 Field Study: National or International
A-F only, 1-4 credit(s), max credits 10, 3 completions allowed;
Instructor: Martin, Caren Samter
Description: Student may contact the instructor or department for information.

IDes 3606 Interior Design Studio VI
A-F only, 4 credit(s);
Instructor: Martin, Caren Samter
Description: Interior Design Studio VI will expand upon the knowledge base achieved in previous studios and lecture courses. The primary focus of the class will be working towards a full-scope office planning and design project. Three projects will be completed; each with a unique client, site, and increasing level of size and complexity. Projects will allow students to experience the design process, with an emphasis on programming and planning, as well as an understanding of open office systems furnishings, creation of a sense of place through development of the concept, and application of wayfinding knowledge. Assignments will focus on human factors, safety and security, meaning of place through concept development and architectural detailing, and an opportunity to build skills through teamwork. In addition, the scope of each project will be increased to allow learning to advance sequentially, moving towards the production of a full set of construction documents. The processes that designers employ define the environments in which people work; whether in a permanent office or a temporary or transitional office, or in a home office. Interior designers shape how work is accomplished, and contribute to human fulfillment that is derived from work. Defining the workplace is a complex endeavor. Both the individuals performing the work, and the work itself is constantly changing. Also, political, economic, and environmental aspects impact the workplace, workplace culture, and in fact the business's very existence. Therefore, the interior designer is a central player in the creation of work, workplace satisfaction, productivity, and performance. The workplace environment must holistically address the needs of the business, the integral work teams, and the individuals themselves. Class time will be focused primarily upon studio work, discussions, critique of student work (by students, the instructor, outside design critics, and code officials), interaction with "clients," field trips, and research. Students will also be required to engage with design professionals though professional networking activities outside of class time as an enrichment exercise.
Style: 10% Lecture, 20% Discussion, 15% Student Presentation, 5% Field Trips, 50% Studio. The principal focus of class is studio; all other class time activities support studio efforts.
Grading: Principally, evaluation of studio projects comprise the majority of the grade, supported by outcomes of written reports and/or digital presentations. Professional networking and in-class participation are also part of the student's evaluation.

IDes 3606 Interior Design Studio VI
A-F only, 4 credit(s);
Instructor: Soules, Maureen Jeanette
Description: Student may contact the instructor or department for information.

IDes 3614 Interior Design Ethics and Professional Practice
A-F only, 4 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: STAFF
Description: The business of interior design, professional ethics and responsible design are emphasized. Students investigate their
responsibility to their business clients, colleagues and the community at large. Professional portfolios and credentials will be discussed. This course will be web enhanced.

**Style:** 35% Lecture, 30% Discussion. Portions of the course on the web

**Grading:** 20% special projects, 30% quizzes, 10% class participation, 40% problem solving.

**Exam Format:** multiple choice, essay

### IDes 4160H Honors Capstone Project

- **Type:** A-F only, 2 credit(s), max credits 4;
- **Instructor:** Hadjiyanni, Tasoulla
- **Description:** Student may contact the instructor or department for information.

### IDes 4160H Honors Capstone Project

- **Type:** A-F only, 2 credit(s), max credits 4;
- **Instructor:** Martin, Caren Samter
- **Description:** Student may contact the instructor or department for information.

### IDes 4160H Honors Capstone Project

- **Type:** A-F only, 2 credit(s), max credits 4;
- **Instructor:** Guerin, Denise A
- **Description:** Student may contact the instructor or department for information.

### IDes 4160H Honors Capstone Project

- **Type:** A-F only, 2 credit(s), max credits 4;
- **Instructor:** Asojo, Abimbola
- **Description:** Student may contact the instructor or department for information.

### IDes 4193 Directed Study in Interior Design

- **Type:** A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Hadjiyanni, Tasoulla
- **Description:** Student may contact the instructor or department for information.

### IDes 4193 Directed Study in Interior Design

- **Type:** A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Martin, Caren Samter
- **Description:** Student may contact the instructor or department for information.

### IDes 4193 Directed Study in Interior Design

- **Type:** A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Guerin, Denise A
- **Description:** Student may contact the instructor or department for information.

### IDes 4193 Directed Study in Interior Design

- **Type:** A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Zollinger, Stephanie Watson
- **Description:** Student may contact the instructor or department for information.

### IDes 4196 Internship in Interior Design

- **Type:** S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Hadjiyanni, Tasoulla  
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design  
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Martin, Caren Samter  
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design  
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Guerin, Denise A  
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design  
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Asojo, Abimbola  
Description: Student may contact the instructor or department for information.

IDes 4607 Interior Design Studio VII  
A-F only, 4 credit(s);  
Instructor: STAFF  
Description: Interior Design Studio for majors. The course addresses sense of place and the contribution of artifacts to interior environments. The projects include using historic precedent for adaptive use or renovation of spaces. Life safety issues and universal design are part of the design parameters.  
Style: 5% Lecture, 10% Discussion. design studio, critique and the design process  
Grading: 15% in-class presentation, 5% class participation, 80% other evaluation. design projects

IDes 4615W Interior Design Research  
A-F only, 2 credit(s); Meets CLE req of Writing Intensive  
Instructor: Guerin, Denise A  
Description: Student may contact the instructor or department for information.

IDes 5193 Directed Study in Interior Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Hadjiyanni, Tasoulla  
Description: Student may contact the instructor or department for information.

IDes 5193 Directed Study in Interior Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Martin, Caren Samter  
Description: Student may contact the instructor or department for information.

IDes 5193 Directed Study in Interior Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Guerin, Denise A  
Description: Student may contact the instructor or department for information.

IDes 5193 Directed Study in Interior Design  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Zollinger, Stephanie Watson  
Description: Student may contact the instructor or department for information.

IDes 5193 Directed Study in Interior Design
A-F only, 1-4 credit(s), max credits 8;
Instructor: Asojo, Abimbola
Description: Student may contact the instructor or department for information.

**IDes 8192 Readings in Interior Design**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Hadjiyanni, Tasoulla
Description: Student may contact the instructor or department for information.

**IDes 8192 Readings in Interior Design**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Martin, Caren Samter
Description: Student may contact the instructor or department for information.

**IDes 8192 Readings in Interior Design**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Guerin, Denise A
Description: Student may contact the instructor or department for information.

**IDes 8192 Readings in Interior Design**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Zollinger, Stephanie Watson
Description: Student may contact the instructor or department for information.

**IDes 8193 Directed Study**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Hadjiyanni, Tasoulla
Description: Student may contact the instructor or department for information.

**IDes 8193 Directed Study**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Martin, Caren Samter
Description: Student may contact the instructor or department for information.

**IDes 8193 Directed Study**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Guerin, Denise A
Description: Student may contact the instructor or department for information.

**IDes 8193 Directed Study**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Zollinger, Stephanie Watson
Description: Student may contact the instructor or department for information.

**IDes 8193 Directed Study**

A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Asojo, Abimbola
Description: Student may contact the instructor or department for information.

**IDes 8222 Plan B Master's Project**

S-N only, 3 credit(s);
Instructor: Hadjiyanni, Tasoulla
Description: Student may contact the instructor or department for information.
IDes 8222 Plan B Master's Project  
S-N only, 3 credit(s);  
Instructor: Martin, Caren Samter  
Description: Student may contact the instructor or department for information.

IDes 8222 Plan B Master's Project  
S-N only, 3 credit(s);  
Instructor: Guerin, Denise A  
Description: Student may contact the instructor or department for information.

IDes 8222 Plan B Master's Project  
S-N only, 3 credit(s);  
Instructor: Zollinger, Stephanie Watson  
Description: Student may contact the instructor or department for information.

IDes 8222 Plan B Master's Project  
S-N only, 3 credit(s);  
Instructor: Asojo, Abimbola  
Description: Student may contact the instructor or department for information.

International Business  2-210 Carlson School of Management

IBus 3002 Managerial Accounting in Argentina  
A-F only, 4 credit(s);  
Instructor: Caliendo, Charles Michael  
Description: Student may contact the instructor or department for information.

IBus 4050 Management of Innovation and Change  
A-F only, 4 credit(s);  
Instructor: Spruth, Steve  
Description: Student may contact the instructor or department for information.

IBus 4080 Life Sciences in South Africa--An International Business Perspective  
A-F only, 4 credit(s);  
Instructor: Bartlett, David Louis  
Description: Student may contact the instructor or department for information.

IBus 6400 Carlson MBA Global Discovery  
A-F only, 1-3 credit(s), max credits 3;  
Instructor: Benraouane, Sid A.  
Description: Student may contact the instructor or department for information.

IBus 6400 Carlson MBA Global Discovery  
A-F only, 1-3 credit(s), max credits 3;  
Instructor: Li, William  
Description: Student may contact the instructor or department for information.

IBus 6400 Carlson MBA Global Discovery  
A-F only, 1-3 credit(s), max credits 3;  
Instructor: Bapna, Ravi  
Description: Student may contact the instructor or department for information.

Interpersonal Relationships Research  104 Child Development

IRel 8001 Proseminar in Interpersonal Relationships Research  
S-N only, 2 credit(s);
Instructor: Collins, W Andrew
Description: Student may contact the instructor or department for information.

IRel 8360 Seminar: Topics in Interpersonal Relationships Research
1-3 credit(s), max credits 6, 3 completions allowed;
Instructor: Simpson, Jeffry A
Description: Student may contact the instructor or department for information.

Introduced Species and Genotypes

ISG 5010 Risk Analysis for Introduced Species and Genotypes
A-F only, 3 credit(s);
Instructor: Andow, David
Description: Student may contact the instructor or department for information.

ISG 8001 Discussions in Introduced Species and Genotypes
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Shaw, Ruth Geyer
Description: Student may contact the instructor or department for information.

ISG 8021 Problem Solving Practicum in Risk Analysis
A-F only, 3 credit(s), max credits 6;
Instructor: Newman, Raymond M
Description: Student may contact the instructor or department for information.

ISG 8031 Cooperative Learning Practicum
A-F only, 1 credit(s);
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

Italian 314 Folwell Hall

Ital 1001 Beginning Italian
5 credit(s); Credit will not be granted if credit has been received for: ITAL 4001;
Instructor: STAFF
Description: Italian 1001 introduces students to the language and culture of Italy. Class time is spent on presentations of new concepts and on continual use of material already taught. Students work individually, in pairs and in groups. They learn to read, write, speak and understand Italian. They view Italian films. Integral parts of this course will be the online assignments (Quia workbook and laboratory manuals) that students are required to do at home and the cultural reading text Stelle, perle e mistero. By the end of the first semester, students can communicate in a number of real life situations and are becoming comfortable with the present and the past tenses. The grade is based on daily participation and homework performance, frequent quizzes, oral exams, compositions, and the final exam. Students who pass 1001 with a grade of +C- or higher can then move on to Italian 1002.
Grading: 15% final exam, 65% quizzes, 5% class participation, 15% other evaluation. oral presentations
Exam Format: Fill in the blank; true/false; essay; short answer

Ital 1002 Beginning Italian
5 credit(s); 1001 or instr consent Credit will not be granted if credit has been received for: ITAL 4002;
Instructor: STAFF
Description: Italian 1002 is the second semester of beginning Italian: students must have completed Italian 1001 with a grade of "C-" or better in order to take Italian 1002. Italian 1002 introduces students to the language and culture of Italy. Class time is spent on presentations of new concepts and on continual use of material already taught. Students work individually, in pairs and in groups. They learn to read, write, speak and understand Italian. They view Italian films. Integral parts of this course will be the online assignments (Quia workbook and laboratory manuals) that students are required to do at home and the cultural reading text Stelle, perle e mistero. By the end of the second semester, students can communicate in a number of real life situations and are becoming comfortable with the present and the past tenses. Students who pass 1002 with a grade of "C-" or higher can then move on to Italian 1003.
Grading: 15% final exam, 65% quizzes, 5% class participation, 15% other evaluation. oral presentations
Exam Format: Short answer; fill in the blank, true/false
Ital 1003 Intermediate Italian
5 credit(s); 1001-1002 Credit will not be granted if credit has been received for: ITAL 4003;
Instructor: STAFF
Description: Italian 1003 is the third semester course of Italian language and culture. (Students must have completed the equivalent of a year of university level Italian instruction before taking this course.) Students concentrate on mastering elements of grammar and on increasing their active vocabularies. They continue to read, write, speak and listen to current Italian. Each student chooses a topic for a cultural presentation, which is both written and spoken. Italian films are integrated into the program. An integral part of this course is reading the text, Pinocchio. The grade is based on daily participation and homework performance, frequent quizzes, oral exams, compositions, cultural presentation and the final exam. At the end of the third semester, students who pass with a grade of “C-“ or higher are ready to move on to Italian 1004 or to study in Italy.
Grading: 10% final exam, 70% quizzes, 5% class participation, 15% other evaluation. oral exam
Exam Format: essay, short answer, fill-in-blank, true/false

Ital 1004 Intermediate Italian
5 credit(s); 1001, 1002, 1003 Credit will not be granted if credit has been received for: ITAL 4004;
Instructor: STAFF
Description: Italian 1004 is the fourth semester course of Italian language and culture. (Students must have completed the equivalent of one and a half years of university level Italian instruction before taking this course.) Having learned all the basic grammar concepts students now concentrate on mastering these elements and on increasing their active vocabularies. They continue to read, write, speak and listen to Italian. Each student chooses a topic for a cultural presentation, which is both written and spoken. Italian films are integrated into the program. At the end of the fourth semester, students who pass with a grade of “C-“ or higher are ready to move on to Italian 3015 or to study in Italy.
Grading: 10% final exam, 70% quizzes, 5% class participation, 15% other evaluation. oral exam
Exam Format: essay, short answer, fill-in-blank, true/false, various presentations

Ital 1837 Imagining Italy: Italian and Italian-American Culture, History, and Society through Film
4 credit(s); Credit will not be granted if credit has been received for: ITAL 3837; Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives
Instructor: Ferlito, Susanna Florenc
Description: Topics discussed will include but not be limited to: Renaissance music, opera, fascism, mafia, contemporary Italian family relations, sexuality, fashion, and Italian American history and culture. Films include: The Name of the Rose, Dangerous Beauty, Il conformista/The Conformist, Death in Venice, La Strada, Allonsonfan, Amarcord, Farinelli, Strategia del ragno, Cinema Paradiso, Pane e Tulipani. Each week the class will have the same format. The film screening on Mondays will be complemented by the lecture on Wednesdays given by faculty whose research and teaching focuses on the particular period of Italian culture represented in the films. Italian 1004 students through 3015 are strongly encouraged to enroll.
Style: Monday: Film viewing: 4:00 - 6:00 Wednesday: Lecture 4:00 - 5:00 Italian Discussion section: 5:00-6:00.
Grading: 80% other evaluation. 4 quizzes/exams (20% each); 20% Attendance and WebCT participation
Exam Format: identify a scene in a film and respond to a question about the film

Ital 1904 Freshman Seminar: Slow Life: Mediterranean Reflections on Modernity
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Ferlito, Susanna Florenc
Description: Slow Life: Mediterranean critical reflections on modernity. fulfills Global Perspectives Theme. Why is slowness, idleness, laziness, “wasting one’s time,” considered so problematic and so demeaning for the modern subject? Is there any virtue or social use to doing nothing or not doing it fast? Why are kids who are labeled “lazy” stigmatized and the health of their self-esteem questioned? Is laziness a sign of moral degeneracy or emotional immaturity? Can laziness function as a sign of social prestige and class status? What about those who cannot “afford” to be idle and not work? Also, how do some cultures and people get labeled as “industrious” or “lazy” and how do such labels work? Can one be idle and at the same time morally and socially responsible? Why, furthermore, is the so-called sweet and slow life (la dolce vita) of Mediterranean cultures so dismissed by and at the same time made so quaintly appealing to so-called modern nations? In this course we will be unraveling the seemingly banal notion of idleness to examine questions of gender, race, philosophy, politics, ethics, history and geography. Through the study of a wide range of films, literary texts and visual images, we will examine how the notion of idleness presupposes a series of fundamental judgments, value systems, and emotional and intellectual responses to the meaning of life. Taught in English. Prerequisites: having fun working hard.
Style: 35% Lecture, 20% Film/Video, 35% Discussion, 5% Small Group Activities, 5% Student Presentation.
Grading: 10% final exam, 70% quizzes, 5% class participation, 15% other evaluation. oral exam
Exam Format: identify a scene in a film and respond to a question about the film

Ital 3015 Reading, Conversation, and Composition
4 credit(s);
Instructor: STAFF
Description: Italian 3015 is a reading-, writing-, and speaking-intensive course. Through a variety of Italian texts and related readings, students will analyze the material both textually and grammatically, exploring their social, historical and cultural relevance. This course is recommended for students who have mastered basic Italian grammar and received a grade of B or higher in preceding Italian coursework.
Exam Format: Active participation in class discussions, written essays, comprehensive exams, in-class presentations

Ital 3209 Literature of Medieval City-States
4 credit(s), max credits 16, 4 completions allowed;
Instructor: Noakes,Susan J
Description: Study, in Italian, of Dante's masterpiece, THE DIVINE COMEDY. [Students wishing to take the course in English should see the note below about Italian 5609, "WORLD OF DANTE."] The 2012 offering of the course will focus on the COMEDY's first volume, the INFERNO. It provides a rich depiction of and commentary upon life in the city-states, from the viewpoint of Florence, in many ways the most successful--and most flawed--among them, in Dante's opinion. Prerequisite: Italian 3015 or equivalent. This is a four-credit course because students must be committed to considerable work on Dante's poetic language, which challenges even some native speakers. Class discussion (in Italian), examinations, class presentations. N.B. Also offered in Fall 2012 is Italian 5609, "World of Dante," which requires no knowledge of Italian. This will be a hybrid course, with students doing online work on Wednesdays and Fridays, and meeting with the instructor on Mondays, during the same hour as the meetings for Italian 3209 on Wednesdays and Fridays (place TBD). Monday meetings will deal not only with the INFERNO, in English, but also with modern literary, visual, and cinematic works "incited" by it, such as Amiri Baraka's THE SYSTEM OF DANTE'S HELL, about being a black American in the 20th century. Weekly online quizzes, class discussion, final examination, short papers.

Ital 3459W Senior Project
1 credit(s);Meets CLE req of Writing Intensive
Instructor: Ferlito,Susanna Florenc
Description: Student may contact the instructor or department for information.

Ital 3837 Imagining Italy: Italian and Italian-American Culture, History, and Society Through Film
4 credit(s);Credit will not be granted if credit has been received for: ITAL 1837;
Instructor: Ferlito,Susanna Florenc
Description: Topics discussed will include but not be limited to: Renaissance music, opera, fascism, mafia, contemporary Italian family relations, sexuality, fashion, and Italian American history and culture. Films include: The Name of the Rose, Dangerous Beauty, Il conformista/The Conformist, Death in Venice, La Strada, Allonsonfan, Amarcord, Farinelli, Strategia del ragno, Cinema Paradiso, Pane e Tulipani. Each week the class will have the same format. The film screening on Mondays will be complemented by the lecture on Wednesdays given by faculty whose research and teaching focuses on the particular period of Italian culture represented in the films. Italian 1004 students through 3015 are strongly encouraged to enroll.
Style: Monday: Film viewing: 4:00 - 6:00 Wednesday: Lecture 4:00 - 5:00 Italian Discussion section: 5:00-6:00.
Grading: 80% other evaluation. 4 quizzes/exams (20% each); 20% Attendance and WebCT participation
Exam Format: identify a scene in a film and respond to a question about the film

Ital 4001 Beginning Italian
2 credit(s);Grad student or instr consent Credit will not be granted if credit has been received for: ITAL 1001;
Instructor: Barbieri,Monica
Description: Student may contact the instructor or department for information.

Ital 4004 Intermediate Italian
2 credit(s);Grad student or instr consent Credit will not be granted if credit has been received for: ITAL 1004;
Instructor: Olivero-Agney,Anna B
Description: Student may contact the instructor or department for information.

Ital 4970 Directed Readings
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF
Description: Meets unique requirements decided on by faculty member and student. Individual contracts are drawn up listing contact hours, number of credits, written and other work required.

Ital 5401 Mondo di Dante
4 credit(s), max credits 16, 4 completions allowed;
Instructor: Noakes,Susan J
Description: Reading of all 3 volumes of Dante's Divina Commedia in Italian, in an edition with an English translation on pages facing the original text and comprehensive explanatory notes in English. Dante's Commedia is the very foundation of spoken Italian to this day, and all students of Italian should know the language of this poem. It is not as "far" from modern Italian as, for example, Shakespeare's English is from modern English; contemporary Italian retains many of Dante's forms and idioms. Once students understand the differences in certain verb endings and pronouns, students with a good reading knowledge of modern Italian will find they can handle Dante's language and enter the fascinating world of the writer recognized by many as one of the world's top two or three poets. Requirements include: active discussion, use of internet and visual materials, oral reports, short papers, rather than examinations, reading of about 1,500 lines of verse per week.

Style: 25% Lecture, 75% Discussion.
Grading: 30% reports/papers, 50% in-class presentation, 20% class participation.

Ital 5609 World of Dante
4 credit(s), max credits 8;
Instructor: Noakes,Susan J
Description: Requires no knowledge of Italian. This will be a hybrid course, with students doing online work on Wednesdays and Fridays, and meeting with the instructor on Mondays, during the same hour as the meetings for Italian 3209 on Wednesdays and Fridays (place TBD). Monday meetings will deal not only with the Inferno, in English, but also with modern literary, visual, and cinematic works "incited" by it, such as Amiri Baraka's The System of Dante's Hell, about being a black American in the 20th century.

Ital 5970 Directed Readings
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF
Description: Meets unique requirements decided on by faculty member and student. Individual contracts are drawn up listing contact hours, number of credits, written and other work required.

Ital 8992 Directed Readings
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Ferlito,Susanna Florenc
Description: Student may contact the instructor or department for information.

Japanese 220 Folwell Hall

Jpn 1011 Beginning Japanese
6 credit(s); Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Tazawa,Kenichi
Description: This course is the first of a two-semester sequence of Beginning Japanese; it is for students who have no previous knowledge of Japanese. It aims to begin development of communication skills in Japanese. Therefore, we will work on the four basic skills of language (speaking, listening, reading, and writing) as well as culture-specific skills (do's and don'ts). The following topics are covered in this semester: 1. Meeting people for the first time 2. Shopping and eating out 3. Describing activities and extending/declining invitations 4. Describing locations and things in the past 5. Making offers and talking about travel 6. Making a request, asking for/giving permission, and talking about rules The course will cover lessons 1 through 6 of Genki including both dialogue/grammar and reading/writing. It is expected that, by the end of this semester, students will have basic conversation skills in situations like those noted above, as well as rudimentary literacy in Japanese. Two types of Japanese characters (hiragana and katakana), as well as 58 Chinese characters (kanji) will be learned.

Style: 25% Lecture, 75% Discussion.
Grading: Lesson Tests 35% (5 times) Oral Interviews 10% (2 times) Dialogue Checks 10% (Each Lesson)

Jpn 3021 Intermediate Japanese
5 credit(s);1012 or instr consent Credit will not be granted if credit has been received for: JPN 4003;
Instructor: Emmett,Keiko
Description: This course is the first of a two-semester sequence of Intermediate Japanese. The course will cover Lessons 13 through 17 of GENKI (the edition published in September, 2011), both sections of dialogue/grammar and of reading/writing. The course aims to develop the four communication skills (i.e., speaking, listening, reading, and writing) at an intermediate level as well as culture-specific skills (do's and don'ts). The items that will be covered in this semester include but are not limited to: 1. Telling what you can or cannot do, 2. Consulting, 3. Explaining things in detail, and 4. Making a request in a polite manner. It is expected that, by the end of this semester, students will have basic conversation skills in situations like those noted above, as well as rudimentary literacy in Japanese. Two types of Japanese characters (hiragana and katakana), as well as 58 Chinese characters (kanji) will be learned.

Style: 25% Lecture, 75% Discussion.
Grading: Lesson Tests 35% (5 times) Oral Interviews 10% (2 times) Dialogue Checks 10% (Each Lesson)
University of Minnesota in or before 2010. The placement test will be given before the fall semester of 2012 begins. Please go to the "Placement Test Info" on the Japanese Language Home Page and register for the test. http://www.all.umn.edu/japanese_language/placement_test_info.html

*Style:* 40% Lecture, 60% Discussion.

**Jpn 3021 Intermediate Japanese**

5 credit(s); 1012 or instr consent
Credit will not be granted if credit has been received for: JPN 4003;
Instructor: Inada, Minori
Description: Student may contact the instructor or department for information.

**Jpn 3031 Third-Year Japanese**

4 credit(s); 3022 or instr consent
Credit will not be granted if credit has been received for: JPN 4005;
Instructor: Buchanan, Michiko Todokoro
Description: Student may contact the instructor or department for information.

**Jpn 3290 Japanese Language Teaching Tutorial**

S-N only, 1 credit(s), max credits 2;
Instructor: Buchanan, Michiko Todokoro
Description: Student may contact the instructor or department for information.

**Jpn 4001 Beginning Japanese**

3 credit(s); Grad student
Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Tazawa, Kenichi
Description: This course is the first of a two-semester sequence of Beginning Japanese; it is for students who have no previous knowledge of Japanese. It aims to begin development of communication skills in Japanese. Therefore, we will work on the four basic skills of language (speaking, listening, reading, and writing) as well as culture-specific skills (do's and don'ts). The following topics are covered in this semester: 1. Meeting people for the first time 2. Shopping and eating out 3. Describing activities and extending/declining invitations 4. Describing locations and things in the past 5. Making offers and talking about travel 6. Making a request, asking for/giving permission, and talking about rules The course will cover lessons 1 through 6 of Genki including both dialogue/grammar and reading/writing. It is expected that, by the end of this semester, students will have basic conversation skills in situations like those noted above, as well as rudimentary literacy in Japanese. Two types of Japanese characters (hiragana and katakana), as well as 58 Chinese characters (kanji) will be learned.
*Style:* 25% Lecture, 75% Discussion.
*Grading:* Lesson Tests 35% (5 times) Oral Interviews 10% (2 times) Dialogue Checks 10% (Each Lesson)

**Jpn 4003 Intermediate Japanese**

3 credit(s); 4002, grad student
Credit will not be granted if credit has been received for: JPN 3021;
Instructor: Emmett, Keiko
Description: This course is the first of a two-semester sequence of Intermediate Japanese. The course will cover Lessons 13 through 17 of GENKI (the edition published in September, 2011), both sections of dialogue/grammar and of reading/writing. The course aims to develop the four communication skills (i.e., speaking, listening, reading, and writing) at an intermediate level as well as culture-specific skills (do's and don'ts). The items that will be covered in this semester include but are not limited to: 1. Telling what you can or cannot do, 2. Consulting, 3. Explaining things in detail, and 4. Making a request in a polite manner. It is expected that, by the end of this semester, students will be able to use the above functions for a job-interview, a request for the extension of a deadline, and so on. Students also will be able to read and write an expository essay. Seventy-nine kanji characters will be introduced, in addition to 145 characters learned in the previous lessons. PREREQUISITE: JPN1012/4002 You are required to take a placement test if: (1) your grade for JPN1012/4002 at the University of Minnesota was neither a C- or better, nor an S, or (2) you completed JPN1012/4002 at the University of Minnesota in or before 2010. The placement test will be given before the fall semester of 2012 begins. Please go to the "Placement Test Info" on the Japanese Language Home Page and register for the test. http://www.all.umn.edu/japanese_language/placement_test_info.html
*Style:* 40% Lecture, 60% Discussion.

**Jpn 4003 Intermediate Japanese**

3 credit(s); 4002, grad student
Credit will not be granted if credit has been received for: JPN 3021;
Instructor: Inada, Minori
Description: Student may contact the instructor or department for information.

**Jpn 4005 Third Year Japanese**

3 credit(s); 4004, grad student
Credit will not be granted if credit has been received for: JPN 3031;
Jpn 4041 Advanced Japanese Conversation and Composition
4 credit(s);
Instructor: Matsumoto,Fumiko
Description: This course aims to improve effective communication skills in speaking, listening, reading and writing in academic settings. Interviews, class presentations, discussions, and reading of texts will be employed in class. The course also aims to deepen the understanding of modern Japanese society and culture as well as to help students be able to talk about their own society and culture in Japanese. Effective learning strategies will be introduced and implemented to help students become independent learners of Japanese. This course will cover Theme 2 and Theme 3 of 'Image of Japan, 2nd Edition', and topics such as "education" and "young people" will be dealt with.

Jpn 5040 Readings in Japanese Texts
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Isaka,Maki
Description: Student may contact the instructor or department for information.

Jpn 5993 Directed Studies in Japanese
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Buchanan,Michiko Todokoro
Description: Student may contact the instructor or department for information.

Jewish Studies  Center for Jewish Studies

JwSt 1034 Introduction to Jewish History and Civilization
3 credit(s);
Instructor: Jassen,Alex P
Description: The course provides a general introduction to Judaism in its many ancient and modern expressions. Students are introduced both to the historical narrative of the Jewish people and the beliefs and practices of the Jewish religion. We begin our story of Jewish history by examining the emergence of Judaism from the world of the Hebrew Bible (Old Testament) and ancient Israel and its continued development under the empires of Persia, Greece, and Rome. We then explore encounters between Judaism, Christianity, and Islam in the medieval world. We then turn to the impact of modernity and the Enlightenment on Judaism and the dramatic transformations that have shaped Judaism in the modern period. Across this broad historical landscape, we explore the diverse beliefs and practices of Judaism. We address the questions of "what do Jews believe"? and "what do Jews do"? through close analysis of different forms of Judaism across time and space. We seek to address the issue of what unites these diverse forms of Judaism and marks them all as Jewish. We also attempt to understand the social, literary, historical, and cultural influences that have helped shape the varieties of Jewish traditions and the influence of Judaism on other religions and cultures. The central ideas and motifs of Judaism to be addressed include: the Bible in Judaism, rabbinic literature, theology, Jewish mysticism (Kabbalah) and philosophy, Jewish law, Jewish nationalism, anti-Semitism, messianism, Jewish culture and identity, the synagogue, ritual and worship, life cycle, festivals and calendar. Students engage with the central questions of Jewish history through reading a wide selection of primary texts in translation, multimedia, classroom discussion, and critical writing assignments. There are no prerequisites for this course. It is intended to provide students with a general introduction to Judaism and stimulate interest in exploring further aspects of Jewish history and civilization and Religious Studies. Full Syllabus at: https://sites.google.com/a/umn.edu/jassen/my-courses/introduction-to-jewish-history-and-civilization
Style: 60% Lecture, 30% Discussion, 10% Small Group Activities.
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.

JwSt 1201 The Bible: Context and Interpretation
3 credit(s);
Instructor: STAFF
Description: Where did the Hebrew Bible ("Old Testament") come from? In what way do the worldviews and traditions expressed by its ancient authors compare with those of the superpowers of their day, including the Canaanites (from Ugarit), the Hittites, the Egyptians,
and the Mesopotamians? How did the text of the Hebrew Bible come to represent a millennium of beliefs, desires, and customs from ancient Israel and Judah, many of which still reverberate in our society today? Integrating a cross-disciplinary spectrum of religion, history, and literature, students in this class will read, analyze, and interpret Hebrew Bible texts in English, using methods employed by biblical scholars. This class fulfills the Liberal Education Requirement of Literature because in it students read the Hebrew Bible as ancient literature, asking questions about language and meaning, literary effects, and the Hebrew Bible's social and historical contexts. Since we will engage in secular study only, analytically examining all relevant religious texts and traditions, students are required to have an open mind and willingness to read and discuss the Bible in a new way.

**JwSt 3034 Introduction to Jewish History and Civilization**

3 credit(s); Credit will not be granted if credit already received for: JwSt 1034/3034/RelA 1034/3034 RelS 1034/3034
Credit will not be granted if credit has been received for: JWST 1034; Meets CLE req of Historical Perspectives
Instructor: Jassen, Alex P
Description: The course provides a general introduction to Judaism in its many ancient and modern expressions. Students are introduced both to the historical narrative of the Jewish people and the beliefs and practices of the Jewish religion. We begin our story of Jewish history by examining the emergence of Judaism from the world of the Hebrew Bible (Old Testament) and ancient Israel and its continued development under the empires of Persia, Greece, and Rome. We then explore encounters between Judaism, Christianity, and Islam in the medieval world. We then turn to the impact of modernity and the Enlightenment on Judaism and the dramatic transformations that have shaped Judaism in the modern period. Across this broad historical landscape, we explore the diverse beliefs and practices of Judaism. We address the questions of "what do Jews believe?" and "what do Jews do?" through close analysis of different forms of Judaism across time and space. We seek to address the issue of what unites these diverse forms of Judaism and marks them all as Jewish. We also attempt to understand the social, literary, historical, and cultural influences that have helped shape the varieties of Jewish traditions and the influence of Judaism on other religions and cultures. The central ideas and motifs of Judaism to be addressed include: the Bible in Judaism, rabbinic literature, theology, Jewish mysticism (Kabbalah) and philosophy, Jewish law, Jewish nationalism, anti-Semitism, messianism, Jewish culture and identity, the synagogue, ritual and worship, life cycle, festivals and calendar. Students engage with the central questions of Jewish history through reading a wide selection of primary texts in translation, multimedia, classroom discussion, and critical writing assignments. There are no prerequisites for this course. It is intended to provide students with a general introduction to Judaism and stimulate interest in exploring further aspects of Jewish history and civilization and Religious Studies. Full Syllabus at: https://sites.google.com/a/umn.edu/jassen/my-courses/introduction-to-jewish-history-and-civilization
Style: 60% Lecture, 30% Discussion, 10% Small Group Activities,
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.

**JwSt 3201 The Bible: Context and Interpretation**

3 credit(s); Credit will not be granted if credit has been received for: RELS 3201; Meets CLE req of Literature
Instructor: STAFF
Description: Where did the Hebrew Bible ("Old Testament") come from? In what way do the worldviews and traditions expressed by its ancient authors compare with those of the superpowers of their day, including the Canaanites (from Ugarit), the Hittites, the Egyptians, and the Mesopotamians? How did the text of the Hebrew Bible come to represent a millennium of beliefs, desires, and customs from ancient Israel and Judah, many of which still reverberate in our society today? Integrating a cross-disciplinary spectrum of religion, history, and literature, students in this class will read, analyze, and interpret Hebrew Bible texts in English, using methods employed by biblical scholars. This class fulfills the Liberal Education Requirement of Literature because in it students read the Hebrew Bible as ancient literature, asking questions about language and meaning, literary effects, and the Hebrew Bible's social and historical contexts. Since we will engage in secular study only, analytically examining all relevant religious texts and traditions, students are required to have an open mind and willingness to read and discuss the Bible in a new way.

**JwSt 3520 History of the Holocaust**

3 credit(s); Credit will not be granted if credit already received for: JWST 1034/3034/RelA 1034/3034 RelS 1034/3034
Credit will not be granted if credit has been received for: JwSt 1034/3034/RelA 1034/3034 RelS 1034/3034
Credit will not be granted if credit already received for: JwSt 1034/3034/RelA 1034/3034 RelS 1034/3034
Credit will not be granted if credit already received for: JWST 1034; Meets CLE req of Historical Perspectives
Instructor: Ashkenazi, Ofer
Description: Student may contact the instructor or department for information.

**JwSt 3778 Jews of the Islamic Mediterranean and Christian Europe, 7th-17th Centuries**

3 credit(s); Credit will not be granted if credit has been received for: RELS 3078
Instructor: Schroeter, Daniel J
Description: The Jewish Diaspora that emerged in late antiquity and the early Middle Ages was remarkably diverse, while at the same time Jews shared common religious and cultural traditions. This course explores how Jews were shaped by the societies and cultures of the Islamic Mediterranean World and Christian Europe from 700 to 1700, while maintaining a distinctive identity. Under the dominant religions of Islam and Christianity, Jews developed autonomous religious and cultural institutions and communities, which frequently changed as Jews were influenced by and adapted to their cultural surroundings and changing historical circumstances. The relationship between diverse Jewish communities throughout the Muslim Mediterranean and Christian Europe is explored. The
connections between communities were created and maintained through trade, travel, and the exchange of rabbinical culture and Jewish religious authority across political boundaries. While Jewish status differed under Muslim and Christian rule, this course explores how the experience of Jews was influenced by changing local circumstances, migrations, expulsions, violence, persecution, and resettlement in new locations with the expansion of trade routes and political change in both the Islamic and Christian worlds.  

**Style:** 80% Lecture, 20% Discussion.  
**Grading:** 20% mid exam, 35% final exam, 30% reports/papers, 15% class participation.

**JwSt 4001W Final Project, Writing Intensive**  
A-F only, 1 credit(s); Meets CLE req of Writing Intensive  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.

**Journalism and Mass Communication 111 Murphy Hall**

**Jour 1001 Introduction to Mass Communication**  
A-F only, 3 credit(s); Pre-jour or non-jour major Credit will not be granted if credit has been received for: JOUR 1001H; Meets CLE req of Social Sciences; meets CLE req of Technology and Society  
Instructor: Paul, Nora  
Description: Student may contact the instructor or department for information.

**Jour 1001 Introduction to Mass Communication**  
A-F only, 3 credit(s); Pre-jour or non-jour major Credit will not be granted if credit has been received for: JOUR 1001H; Meets CLE req of Social Sciences; meets CLE req of Technology and Society  
Instructor: Sanders, Amy Kristin  
Description: Student may contact the instructor or department for information.

**Jour 1001 Introduction to Mass Communication**  
A-F only, 3 credit(s); Pre-jour or non-jour major Credit will not be granted if credit has been received for: JOUR 1001H; Meets CLE req of Social Sciences; meets CLE req of Technology and Society  
Instructor: Lewis, Seth Corwin  
Description: How are new communication technologies (smart phones, tablets, etc.) changing the way media professionals do their work and audiences receive messages? What do we know about the effects of television and video games on children? Are social media going to kill traditional print media (newspapers, magazines, books)? Do advertising and public relations practitioners perform a useful information function in a democracy? Will we still go to a movie theater to see a film five years from now? What is it like to work in news, advertising or public relations? These questions and many more are explored in this course designed to introduce students to the theory and practice of mass communication in the United States. Students interested in majoring in journalism and mass communication must take this course before entering the major. Students interested in how and why mass communication messages function will leave the course with a deeper understanding of the media environment within which we all operate.  
**Style:** 50% Lecture, 25% Discussion, 25% Small Group Activities.  
**Grading:** 15% mid exam, 15% final exam, 29% reports/papers, 8% quizzes, 15% additional semester exams, 17% in-class presentation.  
**Exam Format:** Multiple-choice, matching, and short-answer (short-essay) questions

**Jour 1001H Honors: Introduction to Mass Communication**  
A-F only, 3 credit(s); Honors, [pre-jour or non-jour major] Credit will not be granted if credit has been received for: JOUR 1001; Meets CLE req of Social Sciences; meets CLE req of Technology and Society  
Instructor: Hansen, Kathleen Ann  
Description: How are new communication technologies (smart phones, tablets, etc.) changing the way media professionals do their work and audiences receive messages? What do we know about the effects of television and video games on children? Are social media going to kill traditional print media (newspapers, magazines, books)? Do advertising and public relations practitioners perform a useful information function in a democracy? Will we still go to a movie theater to see a film five years from now? What is it like to work in news, advertising or public relations? These questions and many more are explored in this course designed to introduce students to the theory and practice of mass communication in the United States. Students interested in majoring in journalism and mass communication must take this course before entering the major. Students interested in how and why mass communication messages function will leave the course with a deeper understanding of the media environment within which we all operate.  
**Style:** 40% Lecture, 40% Discussion, 20% Small Group Activities.

**Jour 1905 Freshman Seminar: The Symbolic Meanings of Money**  
A-F only, 3 credit(s);
Instructor: Doyle,Kenneth Owen
Description: Student may contact the instructor or department for information.

Jour 3004W Information for Mass Communication
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Cunninghan,Greta Elizabe
Description: Student may contact the instructor or department for information.

Jour 3004W Information for Mass Communication
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Paul,Nora
Description: This course introduces the concept of the information strategy as it applies to mass communication. The strategies, techniques and resources discussed will apply to any type of mass communication message production; they will also apply to academic work such as term paper and project production. We are most concerned with the process of information gathering, evaluation and use. A case study format will be used to study this process in depth throughout the semester. The case study topic for this semester changes each semester and draws from current news issues for which examples abound in advertising, news and public relations. WebCT is used for all the course materials.
Style: 66% Lecture, 34% Discussion.
Grading: 16% mid exam, 16% final exam, 30% special projects, 12% class participation, 26% problem solving.
Exam Format: Multiple choice and true / false

Jour 3004W Information for Mass Communication
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Watson,Brendan R
Description: Student may contact the instructor or department for information.

Jour 3005 Mass Media Effects
A-F only, 3 credit(s);Meets CLE req of Social Sciences
Instructor: Yzer,Marco
Description: Mass media have been alternately feared, bemoaned, used, and dismissed as tools to change beliefs, attitudes, and behavior. Together, we will explore a century's worth of thinking as to how and when media might have such effects, and whether we might expect that media effects will change as a function of trends in media development. We will approach this topic largely from a social science perspective, and building on current developments in that area will examine media effects using a multilevel approach. That is, will media effects be different for individuals, families, cultures and other possible groups? The idea is as simple as it is challenging: Media effects are the complex interaction of receivers who give meaning to media messages, the source of those messages, and the circumstances in which receivers engage with media messages.
Style: 70% Lecture, 30% Discussion.

Jour 3006 Visual Communication
A-F only, 3 credit(s);
Instructor: Lippold,Luanne Joy
Description: Student may contact the instructor or department for information.

Jour 3101 News Reporting and Writing
A-F only, 3 credit(s);[3004W or Concurrent registration is required (or allowed) in 3004W or 3004V], [jour major or approved IDIM major or ICP major or BIS major]Credit will not be granted if credit has been received for: JOUR 3101H;
Instructor: Stern,Laurie Jane
Description: Student may contact the instructor or department for information.

Jour 3101 News Reporting and Writing
A-F only, 3 credit(s);[3004W or Concurrent registration is required (or allowed) in 3004W or 3004V], [jour major or approved IDIM major or ICP major or BIS major]Credit will not be granted if credit has been received for: JOUR 3101H;
Instructor: Golden,Gayle Celeste
Description: This course teaches the basic skills need to report and write news. The course emphasizes the ability to recognize news values as well as to write clearly, concisely, accurately and in correct Associated Press style about news events. Students will write a variety of stories, including spot news, obituaries, advances and news features. Skills taught include interviewing, attributing, using public records, setting stories in context and applying numbers correctly to tell stories. The course is for professional journalism students at the start of their major course work. Students also create and maintain online news logs to summarize, compare and analyze news coverage.
Jour 3101 News Reporting and Writing
- Style: 60% Lecture, 40% Discussion.
- Grading: 5% mid exam, 70% reports/papers, 10% quizzes, 15% class participation.
- Exam Format: short answer
- Instructor: Moyer, J. Keith
- Description: Student may contact the instructor or department for information.

Jour 3102 Convergence Journalism
- A-F only, 3 credit(s);
- Instructor: Benson, Dana Richard
- Description: Student may contact the instructor or department for information.

Jour 3102 Convergence Journalism
- A-F only, 3 credit(s);
- Instructor: Watson, Brendan R
- Description: Student may contact the instructor or department for information.

Jour 3121 Intermediate News Reporting
- A-F only, 3 credit(s);
- Instructor: Ison, Christopher John
- Description: This is a class tailored to undergraduate journalism majors in the news/editorial sequence. Students will learn how to report on the people, events and institutions that make up the most fundamental news beats in any newsroom. They'll learn by doing - hitting the streets to find news stories at city hall, the police department, the courthouse, etc. They'll need to apply what they learned in Journalism 3101 (Newswriting) and the additional writing skills they learn during the semester in this class. The class will emphasize how to find and use public records for news stories, how to find and interview sources and how to organize information so that stories are interesting and understandable to readers. The instructor will emphasize class discussion to learn about reporting methods, ethics and news judgment. Students will be required to read the newspaper every day and be able to think critically and discuss the news in class. By the end of the semester, students will understand how newsrooms work, and how good reporters produce accurate, high-quality stories for print and broadcast.
- Style: 40% Lecture, 40% Discussion. TV news viewing, guest speakers, in-class exercises, etc.
- Grading: 100% reports/papers. Occasional quizzes, as well as attendance and class participation could factor in to grades

Jour 3121 Intermediate News Reporting
- A-F only, 3 credit(s);
- Instructor: DePass, Dee
- Description: Student may contact the instructor or department for information.

Jour 3155 Editing for Print and Digital Audiences
- A-F only, 3 credit(s);
- Instructor: McKenzie, Sarah Lynn
- Description: Student may contact the instructor or department for information.

Jour 3173W Magazine Writing
- A-F only, 3 credit(s); Meets CLE req of Writing Intensive
- Instructor: Froiland, Paul V
- Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid policies. This course will teach you the concepts and skills of writing for magazines. You will learn how to identify a magazine's niche and how to market stories editors want. Through a series of writing assignments, all of which will be edited and rewritten, you will then learn how to market, develop, and write the most common types of magazine stories. In the end, you will have some experience pitching a story to a publication, giving them the first step into that marketplace.
- Style: 100% Web Based.
- Grading: -5 writing assignments (72%) -5 analysis assignments (8%) - Story development assignments (20%)

Jour 3173W Magazine Writing
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Golden, Gayle Celeste
Description: This course will teach students the concepts and skills of writing for magazines. Students will learn how to identify a magazine's niche and how to market stories editors want. Through a series of writing assignments, all of which will be edited and rewritten, students will then learn how to market, develop and write the most common types of magazine stories. In the end, students will have some experience pitching a story to a publication, giving them the first step into that marketplace.
Style: 50% Lecture, 30% Discussion, 20% Small Group Activities.
Grading: 10% special projects, 70% written homework, 20% class participation.

Jour 3201 Principles of Strategic Communication
A-F only, 3 credit(s);
Instructor: Williams, Jennifer Lisa
Description: Student may contact the instructor or department for information.

Jour 3201 Principles of Strategic Communication
A-F only, 3 credit(s);
Instructor: Housholder, Elizabeth Emma
Description: Student may contact the instructor or department for information.

Jour 3241 Advertising Strategy and Creative Development
A-F only, 3 credit(s);
Instructor: Johnson, Jennifer M
Description: This course introduces students to creative strategic development and conceptual thinking in advertising. They will develop creative ideas and copy based on strategies, with particular emphasis on print. At the end of the term, successful students will be able to recognize solid advertising, develop an intelligent creative strategy, create concepts and copy, and present their ideas to others.
Style: 60% Lecture, 40% Discussion.
Grading: Team presentations account for 40% of final grade and individual quizzes, assignments, and participation account for 60% of final grade.
Exam Format: no standard format

Jour 3251 Evaluative Research in Strategic Communication
A-F only, 3 credit(s);
Instructor: Ball, Jennifer
Description: The strategic communication landscape is growing increasingly complex with increased emphasis on demonstrating the effectiveness of communication efforts. Now more than ever it is critical to keep a finger on the pulse of consumer opinion and accurately assess consumer response to messages. To that end, this class provides a basic knowledge of the quantitative research methods most commonly used by strategic communication professionals. Examination of methods addresses best practice for conducting research as well as considerations for critical evaluation of research results.
Style: 50% Lecture, 20% Discussion, 30% Small Group Activities.
Grading: 15% mid exam, 15% final exam, 40% special projects, 20% written homework, 10% class participation.

Jour 3261 Media Planning
A-F only, 3 credit(s);
Instructor: Herzog, Earl Alphonse
Description: Student may contact the instructor or department for information.

Jour 3279W Professional Writing for Strategic Communication
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Therkelsen, David Jon
Description: Student may contact the instructor or department for information.

Jour 3279W Professional Writing for Strategic Communication
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Reid, Victoria Jane
Description: Jour 3279 is a professional skills course focusing on the development of essential writing capabilities and tactical thinking required for the public relations profession. The course is designed to help students gain experience in researching, interviewing, writing and producing materials used by public relations practitioners. These include: professional biographies, press releases, fact sheets, backgrounders, media alerts, and speeches. Campaign tactics will be discussed throughout the course to provide a strong...
understanding of the public relations process.

Jour 3279W Professional Writing for Strategic Communication  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Keiser, Eva Eileen  
Description: Student may contact the instructor or department for information.

Jour 3321 Media Design  
A-F only, 3 credit(s);  
Instructor: West, Arlene K  
Description: Student may contact the instructor or department for information.

Jour 3321 Media Design  
A-F only, 3 credit(s);  
Instructor: Martin, Peter Lynn  
Description: This class introduces students to the use of Graphics in digital media, students explore basic digital imaging, how we do it, how we repurpose images and a basic investigation of some issues the new media technology brings to the content of our images. We will start with image creation/acquisition, using digital cameras, scanners, both film and flatbed, using Adobe's PhotoShop software to modify the digital images. Assignments include Portrait, font choice, Resume, photo composite and finally, a project that investigates image intent, specifically, how the computer imaging environment affects the student's interpretation of the truth of the image they create. These projects set the tone for undertakings of creative discovery. The class is designed to provide a working knowledge of Adobe PhotoShop and basic aspects of both Quark Xpress or Adobe InDesign and Adobe GoLive programs as a basis to begin exploration of the opportunities that new media technology enables.  
Style: 25% Lecture, 10% Discussion, 65% Laboratory.  
Grading: 100% special projects.

Jour 3321 Media Design  
A-F only, 3 credit(s);  
Instructor: Longley, Nance  
Description: Student may contact the instructor or department for information.

Jour 3321 Media Design  
A-F only, 3 credit(s);  
Instructor: Husom, David Harold  
Description: Student may contact the instructor or department for information.

Jour 3451 Electronic News Writing and Reporting  
A-F only, 3 credit(s);  
Instructor: Benson, Dana Richard  
Description: Student may contact the instructor or department for information.

Jour 3551 Economics of New Media  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
Instructor: Sullivan, Dan  
Description: Many people have great ideas for new ways to use the Internet or other new communications technologies to create value. The problem is figuring out why anyone would pay for these new offerings or invest in them. Solving this problem depends, in large part, on understanding what is new (and unique) about "new media." This course focuses on organizations attempting to use the Internet and related technologies to create new value or to improve the "efficiency" of their existing operations. Particular attention is paid to why companies such as Google and Yahoo are so successful, and why traditional media organizations are struggling to make money on the Internet. Among the topics to be covered are online news, weblogs, searching, e-commerce, ebay, online games, political action organizations, social networking sites and online distribution of music and videos. Format for the class is a mix of lecture and discussion. There are two required books for the course: Re-thinking the Network Economy and The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture. Assignments include a midterm, a final, and 3-4 short writing assignments.  
Style: 60% Lecture, 40% Discussion.  
Grading: 30% mid exam, 30% final exam, 30% reports/papers, 10% class participation.  
Exam Format: mix of short answer and short essay
Jour 3614 History of Media Communication  
A-F only, 3 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society  
Instructor: Dell'Orto, Giovanna  
Description: This course examines the history of media communication through the window of changing media technology, with an emphasis on the impact of new technologies on society. Beginning with the earliest oral approaches to communication, the class surveys the evolution of print, wired telecommunications, radio, television, computer and the Internet. The course focuses on the way technological innovations from the printing press to wireless Internet have changed not only how people share beliefs and information but also what people have communicated through history. The underlying question guiding inquiry through the course's survey of diverse historical times is: How have new communication technologies affected society through time? That entails also exploring the philosophical/ethical foundations in society at different times that shaped how new technologies were applied and how mass communication changed accordingly. Finally, how did mass communication and its related social, cultural, and political contexts change over time? Students are expected to develop an understanding of how technological and communication change has affected differently diverse groups in U.S. society and internationally, and to develop an understanding of the ethical implications of new media technologies and their effects on mass communication. The class is in part a study of history and in part the "doing" of history; in addition to attending lectures, participating in small-group discussions, studying the assigned readings and completing two exams, students are required to write a brief research paper.

Jour 3741 People of Color and the Mass Media  
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US  
Instructor: Williams, Jennifer Lisa  
Description: Student may contact the instructor or department for information.

Jour 3745 Mass Media and Popular Culture  
A-F only, 3 credit(s); Non-jour major or [jour major, course appr on prog plan] or [pre-jour, adviser approval] Credit will not be granted if credit has been received for: JOUR 3745H; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: Williams, Jennifer Lisa  
Description: Student may contact the instructor or department for information.

Jour 3745 Mass Media and Popular Culture  
A-F only, 3 credit(s); Non-jour major or [jour major, course appr on prog plan] or [pre-jour, adviser approval] Credit will not be granted if credit has been received for: JOUR 3745H; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: Nelson, Rob  
Description: Student may contact the instructor or department for information.

Jour 3771 Mass Media Ethics: Moral Reasoning and Case Studies  
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics  
Instructor: Kirtley, Jane E  
Description: This course will help students build a foundation for making sound, ethical decisions under the kinds of difficult circumstances that journalism and strategic communications professionals face every day. Although we'll explore philosophical theories as a foundation for our discussion and analysis, this course is primarily a pragmatic one, considering how values, principles, and processes can be utilized to identify ethical dilemmas in the mass media, and to make reasoned judgments in challenging situations. We'll hear from guest speakers and debate real-life case studies in classroom discussions and written assignments. And we'll use movies -- both classic films and more recent ones -- in a variety of ways to help us explore these topics in more depth. Students are expected to read or watch news coverage daily, and to be familiar with current events, especially those raising ethical concerns for journalists and other professional communicators.  
Style: 30% Lecture, 20% Film/Video, 30% Discussion, 20% Guest Speakers.  
Grading: 20% mid exam, 20% final exam, 45% reports/papers, 15% quizzes. Students may improve their grades through exceptional class participation.  
Exam Format: Essay and short answer.

Jour 3776 Mass Communication Law  
A-F only, 3 credit(s);  
Instructor: Larson, Bob  
Description: Student may contact the instructor or department for information.

Jour 3796 Mass Media and Politics  
A-F only, 3 credit(s);
Instructor: Rash, John Richard  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Doyle, Kenneth Owen  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Sullivan, Dan  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Ison, Christopher John  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Pedelty, Mark Holmes  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Schwartz, Dona  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Tims, Albert R  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Wackman, Daniel Bruce  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Hansen, Kathleen Ann  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Golden, Gayle Celeste  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Kirtley, Jane E  
Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study  
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Eighmey, John  
Description: Student may contact the instructor or department for information.
Jour 3993 Directed Study
  A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
  Instructor: Huh, Jisu
  Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study
  A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
  Instructor: Yzer, Marco
  Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study
  A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
  Instructor: Squires, Catherine R
  Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study
  A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
  Instructor: Sanders, Amy Kristin
  Description: Student may contact the instructor or department for information.

Jour 3993 Directed Study
  A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
  Instructor: Thiel-Stern, Shayla
  Description: Student may contact the instructor or department for information.

Jour 3996 Directed Internship
  S-N only, 1 credit(s), max credits 3, 3 completions allowed;
  Instructor: Benson, Dana Richard
  Description: Student may contact the instructor or department for information.

Jour 3996 Directed Internship
  S-N only, 1 credit(s), max credits 3, 3 completions allowed;
  Instructor: Ison, Christopher John
  Description: Student may contact the instructor or department for information.

Jour 3996 Directed Internship
  S-N only, 1 credit(s), max credits 3, 3 completions allowed;
  Instructor: Therkelsen, David Jon
  Description: Student may contact the instructor or department for information.

Jour 3996 Directed Internship
  S-N only, 1 credit(s), max credits 3, 3 completions allowed;
  Instructor: Golden, Gayle Celeste
  Description: Student may contact the instructor or department for information.

Jour 3996 Directed Internship
  S-N only, 1 credit(s), max credits 3, 3 completions allowed;
  Instructor: Broeckert, Jerry
  Description: Student may contact the instructor or department for information.

Jour 3996 Directed Internship
  S-N only, 1 credit(s), max credits 3, 3 completions allowed;
  Instructor: Johnson, Jennifer M
  Description: Student may contact the instructor or department for information.

Jour 4242 Advertising Portfolio Development
  A-F only, 3 credit(s);
Instructor: Johnson, Jennifer M
Description: This course introduces students to advertising creative development and conceptual thinking. Students will work in teams that include account planners, copywriters, and art directors. They will develop creative strategy briefs and present ideas based on their strategies. At the end of the term, successful students will be able to apply practical creativity to advertising ideas and will have a basic understanding of how to put a book together to get a job in advertising.
Style: 30% Lecture, 20% Laboratory. This class is highly interactive. Students must contribute to class creative exercises and assignments during each meeting.
Grading: A midterm creative review and a final creative review, by advertising professionals, will help determine final grades. Completion of assignments and level of improvement will also weigh heavily on grade. Student participation is critical.

Jour 4259 Strategic Communication Case Analysis
A-F only, 3 credit(s);
Instructor: Strother, Patrick J
Description: Student may contact the instructor or department for information.

Jour 4259 Strategic Communication Case Analysis
A-F only, 3 credit(s);
Instructor: Gore, Daniel Asher
Description: Student may contact the instructor or department for information.

Jour 4259 Strategic Communication Case Analysis
A-F only, 3 credit(s);
Instructor: Kaiser, Kent Luther
Description: Student may contact the instructor or department for information.

Jour 4259 Strategic Communication Case Analysis
A-F only, 3 credit(s);
Instructor: Kucharski, Matthew John
Description: A comprehensive review of current and classic case studies in strategic communications planning and thinking. Covers a wide range of communications disciplines, scenarios and industries.

Jour 4259 Strategic Communication Case Analysis
A-F only, 3 credit(s);
Instructor: Eighmey, John
Description: This course examines a selection of 12 strategic communication cases related to communication campaigns in business, government, education, and community. WebCT is used for class slides and other materials.
Style: 50% Lecture, 50% Discussion.
Grading: 50% reports/papers, 40% special projects, 10% class participation. 12 executive summary case study write-ups and a group semester project.
Exam Format: No exams.

Jour 4263 Strategic Communication Campaigns
A-F only, 4 credit(s);
Instructor: Weitz, Carol Ruth
Description: An in-depth look at all aspects of strategic campaign development, culminating in the development of a strategically sound communications campaign. Emphasis on "real life" examples of campaigns, their creation and development. All essentials of developing strategic communication campaigns are covered, including advertising strategy and positioning, developing creative, consumer research, planning and setting objectives, media strategies, public relations programs, promotion, and targeting and segmentation. Course involves team work, multi-media presentations and class discussion.

Jour 4263 Strategic Communication Campaigns
A-F only, 4 credit(s);
Instructor: Moorhouse, Bruce Thompson
Description: Student may contact the instructor or department for information.

Jour 4274W Advertising in Society
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Wackman, Daniel Bruce
**Description:** Advertising in Society introduces students to a variety of issues regarding ways in which advertising is linked to society. It examines these issues from several perspectives: social, cultural, economic, legal, and ethical. The course differs from professionally-oriented classes which study advertising from the perspective of a professional attempting to develop effective advertising. As a writing intensive course, Advertising in Society helps students learn how to conduct thorough analyses of issues, develop positions on issues, and present coherent and convincing arguments for positions they have taken. We begin the course with a four week section focusing on one issue involving the relationship between advertising and society. The issue chosen illustrates the complex, multifaceted nature of advertising--society issues. The next six weeks focus on the role of advertising in the economic system and the ways in which advertising is regulated to try to insure fair competition and to protect consumers. The last five weeks focus on social criticisms of advertising and the social responsibilities of advertising practitioners.

**Style:** 35% Lecture, 65% Discussion.

**Grading:** 24% mid exam, 24% final exam, 43% reports/papers, 6% special projects, 3% class participation.

**Exam Format:** multiple choice, short answer, and essay

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**Jour 4302 Electronic Photojournalism**

A-F only, 3 credit(s);

Instructor: Zerby, Mike

**Description:** Jour 4302 is a basic skills course, designed to teach a journalism student the fundamentals of electronic photojournalism as practiced by newsrooms across many forms of media. The course will: 1) create a foundation for understanding the historical, technical, aesthetic and ethical development of journalistic photography. 2) discuss and practice the principles of communication as embodied in the profession of photojournalism, including how to: a) conceptualize and plan photo shoots, photo stories, and essays. b) research story ideas, develop shooting strategies, gain access to subjects. c) structure and present visual narratives in print and on the internet. d) enable a student to acquire some of the camera and computer skills necessary to practice the craft of electronic photojournalism, including some digital darkroom processing. e) involve students in executing photo assignments and experiencing frequent critiques, thus beginning the creation of a portfolio of journalistic photography suitable for job seeking. The content and direction of this course will not presume great prior knowledge or skills. However, students with experience may proceed to more distant horizons. All photographic assignments will all be done with digital equipment. The primary focus will be on achieving access, capturing content and accomplishing journalistic story telling. The course will refer to other reporting competencies such as: technology, press responsibility, cultural sensitivity and ethics.

**Style:** 30% Lecture, 20% Discussion, 50% Laboratory.

**Grading:** 10% quizzes, 20% in-class presentation, 10% class participation, 60% problem solving.

**Exam Format:** performance on problem solving IS exam

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**Jour 4451 Capstone: Advanced Electronic News Writing and Reporting**

A-F only, 3 credit(s);

Instructor: Benson, Dana Richard

**Description:** Student may contact the instructor or department for information.

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**Jour 4733H Honors Thesis Seminar**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

Instructor: Wackman, Daniel Bruce

**Description:** Student may contact the instructor or department for information.

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**Jour 4990 Special Topics in Mass Communication: Professional: Covering Sports Across the Media Landscape**

A-F only, 3 credit(s), max credits 6;

Instructor: Moyer, J. Keith

**Description:** Student may contact the instructor or department for information.

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**Jour 4991 Special Topics in Mass Communication: Context: WAM APP: Creating an App for Weisman Art Museum**

A-F only, 3 credit(s), max credits 6;

Instructor: LeFevre, Camille Lynn

**Description:** Student may contact the instructor or department for information.

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**Jour 4992 Capstone: Field Based Practicum**

A-F only, 3 credit(s), max credits 6;

Instructor: Golden, Gayle Celeste

**Description:** Student may contact the instructor or department for information.

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**Jour 4993H Honors: Projects**

A-F only, 3 credit(s);
Instructor: Doyle_Kenneth Owen
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Benson_Dana Richard
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Sullivan_Dan
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Ison_Christopher John
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Pedelty_Mark Holmes
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Williams_Jennifer Lisa
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Schwartz_Dona
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Tims_Albert R
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Wackman_Daniel Bruce
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Hansen_Kathleen Ann
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Leighton_Gordon
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Golden_Gayle Celeste
Description: Student may contact the instructor or department for information.
Jour 4993H Honors: Projects
  A-F only, 3 credit(s);
  Instructor: Kirtley, Jane E
  Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
  A-F only, 3 credit(s);
  Instructor: Eighmey, John
  Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
  A-F only, 3 credit(s);
  Instructor: Huh, Jisu
  Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
  A-F only, 3 credit(s);
  Instructor: Yzer, Marco
  Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
  A-F only, 3 credit(s);
  Instructor: Johnson, Jennifer M
  Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
  A-F only, 3 credit(s);
  Instructor: Squires, Catherine R
  Description: Student may contact the instructor or department for information.

Jour 5131 Capstone: In-Depth Reporting
  A-F only, 3 credit(s);
  Instructor: Ison, Christopher John
  Description: Student may contact the instructor or department for information.

Jour 5174 Capstone: Magazine Editing and Production
  A-F only, 4 credit(s);
  Instructor: Larsen, Elizabeth F
  Description: Student may contact the instructor or department for information.

Jour 5251 Psychology of Advertising
  A-F only, 3 credit(s);
  Instructor: Huh, Jisu
  Description: Why do people like or dislike certain brands? Can ads make people buy things they don't need or want? Why does McDonald's use different ads in different countries? Is direct-to-consumer advertising of prescription drugs the main reason for the increasing U.S. healthcare spending? To answer these and many other advertising-related questions, it is essential for you to understand the psychology behind advertising strategies and advertising effects. Psychology of Advertising is designed to be an introduction to the underlying theories of consumer behavior that influence advertising strategy and explain why and how advertising works. This course helps students understand the consumer decision-making process, the role of advertising in the process, and various psychological, social, cultural, and message factors that affect advertising effects and effectiveness. The content of this course borrows from theories and research in psychology, sociology, marketing, communications, anthropology, and economics. The goals of this course are for upper-level undergraduate or graduate students to learn important concepts and theories of consumer behavior and consumer psychology, and to be able to apply the theories to real-world advertising situations to become more effective practitioners.
as well as more critical consumers of advertising.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 20% mid exam, 20% final exam, 50% reports/papers, 10% attendance.

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**Jour 5501 Communication and Public Opinion**

**A-F only, 3 credit(s);**

**Instructor:** LaMarre, Heather Lyn

**Description:** Student may contact the instructor or department for information.

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**Jour 5725 Management of Media Organizations**

**A-F only, 3 credit(s);**

**Instructor:** Sullivan, Dan

**Description:** This course is designed to expose journalism majors and other interested students, both graduate and undergraduate, to the concepts and principles of management as they uniquely apply to media organizations; to teach students about the key management issues facing media organizations today. Course time is divided equally between operational issues and business strategy issues. Particular attention is paid to the impact of the Internet and to current real world developments. The course also integrates a wide scope of literature from the fields of business, psychology, mass media and law. A key part of student work will be a group project analyzing a real issue at a Twin Cities media company.

**Style:** 50% Lecture, 30% Discussion. Case studies

**Grading:** 20% mid exam, 20% final exam, 20% reports/papers, 30% special projects, 10% class participation.

**Exam Format:** short answer and essay

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**Jour 5777 Contemporary Problems in Freedom of Speech and Press**

**A-F only, 3 credit(s);** Jour major or jour minor or approved IDIM major or ICP major or BIS major

**Credit will not be granted if credit has been received for:** LAW 6030;

**Instructor:** Kirtley, Jane E

**Description:** Course objective: to consider whether and how growing concerns about privacy and national security will affect traditional First Amendment legal theories. We will read and analyze significant court decisions and statutes, as well as some international initiatives, and consider their impact on U.S. law governing prior restraints, newsgathering and dissemination, access to courts and government information, and government regulation of electronic communications. This course is aimed at upper-level undergraduates and graduate students with a background in First Amendment, media and/or constitutional law (such as JOUR 3776 or equivalent), and is cross-listed with LAW 6030, and therefore will include law students. Course assumes students have knowledge of basic legal research techniques. Thorough preparation and class participation is required of all students in this seminar-format course.

**Style:** 10% Lecture, 75% Discussion. Student presentations of papers at the end of the semester.

**Grading:** 15% mid exam, 50% reports/papers, 10% in-class presentation, 25% class participation.

**Exam Format:** Essay

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**Jour 5993 Directed Study**

**A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;**

**Instructor:** Doyle, Kenneth Owen

**Description:** Student may contact the instructor or department for information.

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**Jour 5993 Directed Study**

**A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;**

**Instructor:** Sullivan, Dan

**Description:** Student may contact the instructor or department for information.

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**Jour 5993 Directed Study**

**A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;**

**Instructor:** Ison, Christopher John

**Description:** Student may contact the instructor or department for information.

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**Jour 5993 Directed Study**

**A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;**

**Instructor:** Pedelty, Mark Holmes

**Description:** Student may contact the instructor or department for information.

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**Jour 5993 Directed Study**
Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Schwartz, Dona
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Tims, Albert R
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Wackman, Daniel Bruce
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Hansen, Kathleen Ann
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Golden, Gayle Celeste
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Kirtley, Jane E
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Eighmey, John
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Huh, Jisu
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Yzer, Marco
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Squires, Catherine R
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Sanders, Amy Kristin
Description: Student may contact the instructor or department for information.

Jour 5993 Directed Study
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Thiel, Shayla
Description: Student may contact the instructor or department for information.
Jour 8001 Studies in Mass Communication I  
A-F only, 3 credit(s);  
Instructor: Huh, Jisu  
Description: Student may contact the instructor or department for information.

Jour 8002 Studies in Mass Communication II  
A-F only, 3 credit(s);  
Instructor: Sanders, Amy Kristin  
Description: Student may contact the instructor or department for information.

Jour 8003 The Changing Media Environment  
A-F only, 3 credit(s);  
Instructor: Lewis, Seth Corwin  
Description: Student may contact the instructor or department for information.

Jour 8200 Communication Strategy Research in Rapidly Changing and Complex Media Environments  
A-F only, 3 credit(s);  
Instructor: Eighmey, John  
Description: Student may contact the instructor or department for information.

Jour 8201 Factors Affecting Communication Strategy  
A-F only, 3 credit(s);  
Instructor: Therkelsen, David Jon  
Description: Student may contact the instructor or department for information.

Jour 8204 Measuring the Effectiveness of Strategic Communication Campaigns  
A-F only, 3 credit(s);  
Instructor: LaMarre, Heather Lyn  
Description: Student may contact the instructor or department for information.

Jour 8502 Seminar: Multi-method research in Mass Communication  
A-F only, 3 credit(s);  
Instructor: Yzer, Marco  
Description: Student may contact the instructor or department for information.

Jour 8602 Seminar: History of Mass Communication  
A-F only, 3 credit(s);  
Instructor: Dell’Orto, Giovanna  
Description: This seminar provides opportunities to explore communication history's scholarly traditions and dimensions, as well as some core literature and new trends in research (both quantitative and qualitative). In addition to critical analysis of specific assigned readings, the course includes: 1) Consideration of mass communication historiography (the history of the field); 2) Attention to the evolution of explicit and implicit theories and models; 3) Exploration of different types of mass communication histories. Topics are chosen to introduce students to diversity in communication history: in scholarly approaches, in fields of interest, in conceptual frameworks, and in reflections of multiculturalism. The writings assignments and student-led class discussions are designed to advance seminar members' individual research projects, which can be within or outside mass communication history per se (e.g., a student of 21st century new media would be learning about previous use of technology-centered explanations of change in communication). Meaningful class participation and the development of a research agenda are essential to succeed in this course. Inquiry will be driven by three major sets of questions: 1) How have different scholars defined “mass communication” as a historical concept? Have they focused on medium, message, audience, production, etc.? 2) What are the significant agents of change in mass communication history? What roles have been played by technologies, ideas, cultures, politics, individuals? 3) How do historical developments in mass communication relate to other social, cultural and political processes, including the development of a public sphere, democratic discourses, and multiculturalism?

Jour 8993 Directed Study  
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;  
Instructor: Doyle, Kenneth Owen  
Description: Student may contact the instructor or department for information.
Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Sullivan, Dan
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Ison, Christopher John
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Pedelty, Mark Holmes
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Dell'Orto, Giovanna
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Schwartz, Dona
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Tims, Albert R
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Wackman, Daniel Bruce
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Hansen, Kathleen Ann
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Golden, Gayle Celeste
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Kirtley, Jane E
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Eighmey, John
Description: Student may contact the instructor or department for information.
Instructor: Huh, Jisu
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Yzer, Marco
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Squires, Catherine R
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Sanders, Amy Kristin
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Thiel-Stern, Shayla
Description: Student may contact the instructor or department for information.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: LaMarre, Heather Lyn
Description: Student may contact the instructor or department for information.

Kinesiology 220 Cooke Hall

Kin 1050 Beginning Military Physical Fitness Training
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Adams, Timothy William
Description: Student may contact the instructor or department for information.

Kin 1871 Survey of Kinesiology, Recreation, and Sport
A-F only, 3 credit(s);
Instructor: Bhalla PhD, Jennifer Anita
Description: Professional practice and disciplinary dimensions of kinesiology, recreation, and sport. Subdisciplines, relevant issues, practical applications.

2 credit(s), max credits 6;
Instructor: Dengel PhD, Donald Robert
Description: Student may contact the instructor or department for information.

Kin 1905 Freshman Seminar: Soccer Hooliganism: Exploring the Social Impact
2 credit(s), max credits 6;
Instructor: Bhalla PhD, Jennifer Anita
Description: Interdisciplinary seminar. Topics specified in Class Schedule.

Kin 3001 Lifetime Health and Wellness
A-F only, 3 credit(s); Meets CLE req of Social Sciences
Instructor: Ingraham PhD, Stacy Jean
Description: This class addresses current health and wellness issues at the individual, local and global levels. The components of wellness involve; physical, social, emotional, intellectual, spiritual, environmental and financial health. The goal of the class is to develop strategies that improve quality of life throughout life expectancy. This is an interactive class through lecture. The target audience for this class is students desiring a healthy and productive life.
### Kin 3001 Lifetime Health and Wellness

**A-F only, 3 credit(s); Meets CLE req of Social Sciences**

**Instructor:** Statt, Eric H  
**Description:** Overview of health and wellness, including physical, emotional, intellectual, spiritual, social, environmental, and financial health. Societal changes and the influences of these changes on the general health and wellness of diverse populations.

### Kin 3001 Lifetime Health and Wellness

**A-F only, 3 credit(s); Meets CLE req of Social Sciences**

**Instructor:** Wilson, Patrick Benjamin  
**Description:** Overview of health/wellness. Physical, emotional, intellectual, spiritual, social, environmental, and financial health. Influence of societal changes on general health/wellness of diverse populations.

### Kin 3027 Human Anatomy for Kinesiology Students

**A-F only, 3 credit(s);**

**Instructor:** Biltz MD, George R  
**Description:** Introduction to human anatomy. Emphasizes musculoskeletal anatomy germane to athletic training, biomechanics, exercise physiology, motor learning/development.

### Kin 3050 Advanced Military Physical Fitness Training

**A-F only, 1 credit(s), max credits 4, 4 completions allowed;**

**Instructor:** Adams, Timothy William  
**Description:** Student may contact the instructor or department for information.

### Kin 3112 Introduction to Biomechanics

**A-F only, 4 credit(s);**

**Instructor:** STAFF  
**Description:** Mechanical principles governing human motion. Human bone, muscle, neurophysiology. Measurements of human performance. Clinical/applied sport biomechanics. Lab introduces technology for assessing human motor function, such as electromyography or force sensors.

### Kin 3114 Prevention and Care of Athletic Injuries

**A-F only, 3 credit(s);**

**Instructor:** Osgood, Chad Thomas  
**Description:** Principles in athletic training for prevention/care of injury. Taping/bracing techniques. Lab.

### Kin 3126W Sport and Exercise Psychology

**A-F only, 3 credit(s); Meets CLE req of Writing Intensive**

**Instructor:** Steele, Reed Henderson  
**Description:** Sport and exercise psychology encompasses the thoughts, feelings, and behaviors of people in physical activity contexts. A foundations approach to theory and research in sport and exercise psychology is adopted in the course. Course Objectives: 1. Introduce you to the field of sport and exercise psychology by providing a broad overview of the major areas of the discipline. 2. Increase your understanding of how psychological factors influence participation and performance in sport and exercise settings. 3. Increase your understanding of how sport and exercise participation influences the psychological factors of the participant. 4. Understand how to examine a topic from a psychological perspective. 5. Develop critical writing and thinking skills by practicing different types of writing, learning to clearly articulate ideas, giving and receiving constructive writing feedback, and integrating research, course material, and practice verbally and on paper.  
**Style:** 50% Lecture, 30% Discussion, 20% Small Group Activities.  
**Grading:** 20% mid exam, 20% final exam, 45% reports/papers, 5% attendance, 5% in-class presentation, 5% class participation.

### Kin 3131W History and Philosophy of Sport

**A-F only, 3 credit(s); Meets CLE req of Writing Intensive**

**Instructor:** Weiss PhD, Maureen  
**Description:** Introductory description and interpretation of the historical and philosophical development of physical education and sport
from primitive societies to 20th century civilization.

**Kin 3132** Introduction to Motor Development Across the Lifespan  
A-F only, 3 credit(s);  
Instructor: STAFF  
**Description:** Developmental aspects of human movement behavior/learning. Life span change of motor skills.

**Kin 3135** Introduction to Motor Learning and Control  
A-F only, 3 credit(s);  
Instructor: Wade PhD, Michael G  
**Description:** This course reviews the elements that account for how we coordinate and control the range of human motor skills that represent both our phylogenetic and ontogenetic development. The course reviews both the theoretical ideas and the functional ways in which humans acquire motor skills and the variables that can both enhance and constrain the learning of motor skills. The content includes both lecture and laboratory experiences.

**Kin 3135** Introduction to Motor Learning and Control  
A-F only, 3 credit(s);  
Instructor: Mayo, Anthony Maurice  
**Description:** Student may contact the instructor or department for information.

**Kin 3143** Organization and Administration of Sport  
A-F only, 3 credit(s);  
Instructor: STAFF  
**Description:** Principles, policies, and procedures involved in the administration and management of sports programs at the interscholastic and intercollegiate levels.

**Kin 3151** Measurement and Evaluation in Kinesiology  
A-F only, 3 credit(s);  
Instructor: Bonikowske, Amanda Rachelle  
**Description:** Student may contact the instructor or department for information.

**Kin 3151** Measurement and Evaluation in Kinesiology  
A-F only, 3 credit(s);  
Instructor: Galvan, Jessica A  
**Description:** Introduction to philosophy of measurement/evaluation in physical education, exercise science, sport, and leisure. Test/assessment selection, construction, evaluation, and administration. Interpretation of scores.

**Kin 3171** Baseball Coaching Theory and Skill Development  
A-F only, 2 credit(s);  
Instructor: Bateman, Keith Allen  
**Description:** Coaching theory and skill development necessary to coach baseball.

**Kin 3172** Basketball Coaching Theory and Skill Development  
A-F only, 2 credit(s);  
Instructor: Dewitt, David Francis  
**Description:** Coaching theory and skill development necessary to coach basketball.

**Kin 3178** Tennis Coaching Theory and Skill Development  
A-F only, 2 credit(s);  
Instructor: Sanny, John H  
**Description:** Coaching theory and skill development necessary to coach tennis. This is not a Beginning Tennis course. Students should have a basic understanding and skill level in the sport of tennis, although it is not required. Instruction will center on the student as a prospective coach, and then subsequently how to coach a group of players, and also help an individual player learn to play tennis regardless of their own skill level. Coaching skills to teach players how to play, then how to perform will be emphasized, along with theories on leadership, group development, conflict management etc. To be clear, U of M Students HAVE learned how to play tennis in this course, and our U classes spend as much time on the outdoor courts as weather allows. But the learning takes place largely from the perspective of a coach to a team or individual, hence a "Tennis Coaching Theory & Skill Development" course. Proper tennis court shoes and a tennis racquet are mandatory. Students wearing anything other than proper court shoes will NOT be allowed on the courts.
at any time. Inst Sanny

**Style:** 20% Lecture, 80% Laboratory. Before courts are ready for use, we will be in the classroom for lecture and videos about tennis and/or coaching. On-court time will be short lecture, then practicing skills.

**Grading:** 7% mid exam, 17% final exam, 46% reports/papers, 15% in-class presentation, 15% laboratory evaluation. Attendance is mandatory. 5 points deducted from your total for each absence after one allowed skip. The laboratory 15% is an on-court skills exam. The 15% in-class participation is credit toward attendance.

**Exam Format:** T/F - Multiple choice - fill in blank

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**Kin 3179 Track and Field Coaching Theory and Skill Development**

**A-F only, 2 credit(s);**

**Instructor:** Johnson, Samuel Cory

**Description:** Student may contact the instructor or department for information.

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**Kin 3327 Teaching Physical Education in the Elementary School**

**A-F only, 2 credit(s);**

**Instructor:** Mooers, Nancy Eileen Ro

**Description:** This course is designed for the elementary (K-8) classroom teacher. The course is activity based and designed to give the classroom teacher the ability to engage their students in age appropriate, energizing activities. Both the classroom and the gymnasium will be used for instruction and micro-teaching. Physical education classes in the gymnasium will be active while experiencing current curriculum and methodology. Emphasis will focus on the importance of regular and active physical education to the total school curriculum, with the inclusion of the health, social, and emotional benefits for the child. Elements of an effective quality physical education program will be included, such as, knowledge about the growing child, management skills, curriculum, lesson plan design, lesson presentation, communication, and age appropriate activities. Techniques to enhance communication, collaboration and integration between the physical education teacher and the classroom teacher, meeting special needs, and community involvement are also regularly addressed.

**Style:** 25% Lecture, 15% Discussion. Teacher modeling with student participation and student micro-teaching

**Grading:** 40% reports/papers, 15% special projects, 20% in-class presentation, 25% class participation.

**Exam Format:** No exams, performance assessment only

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**Kin 3327 Teaching Physical Education in the Elementary School**

**A-F only, 2 credit(s);**

**Instructor:** Heisel, Nancy

**Description:** Overview of the elementary physical education process with focus on a classroom teacher's perspective and needs. Representative experiences include participation, lecture, micro-teaching, final test.

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**Kin 3385 Human Physiology**

**A-F only, 4 credit(s);**

**Instructor:** Biltz MD, George R

**Description:** Functional/integrative approach organized by level of description, from molecular genetics to dynamic movement/clinical conditions. Cellular mechanisms for major physiological functions. Exercise, fitness, health, growth.

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**Kin 3505 Intro to Human-Centered Design**

**3 credit(s); Credit will not be granted if credit has been received for: KIN 5505;**

**Instructor:** Smith, Thomas J

**Description:** Human-centered design (also termed user-centered design, usability engineering, human engineering or universal design) is an interdisciplinary area of design study that focuses on how design can be tailored to address, accommodate, and meet human expectations, capabilities, needs, and limitations. The rationale for the course is that: 'good design makes things work better and last longer, helps make people and business more productive, and reduces discomfort and waste.' The basic premise for the course is that 'good' design means human-centered design (HCD). The course will address this premise from a number of different perspectives, considering HCD of fabricated artifacts, human-computer interfaces, built environments, and complex sociotechnical and organizational systems and environments. The course will offer a diverse mix of lecture, open discussion, design analysis projects, guest speakers, field site visits and evaluations, and differing cultural approaches to design.

**Style:** 40% Lecture, 20% Discussion. student presentations

**Grading:** 75% reports/papers, 25% in-class presentation.

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**Kin 3696 Supervised Practical Experience**

**S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;**

**Instructor:** Buysse PhD, Jo Ann

**Description:** On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of
study or emphasis.

Kin 3696 Supervised Practical Experience
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Plunkett MA, Elizabeth Anne
Description: On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of study or emphasis.

Kin 3696 Supervised Practical Experience
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Vollum, Matt
Description: On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of study or emphasis.

Kin 3696 Supervised Practical Experience
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Ingraham PhD, Stacy Jean
Description: On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of study or emphasis.

Kin 3696 Supervised Practical Experience
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Maples, Alyssa
Description: On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of study or emphasis.

Kin 3696 Supervised Practical Experience
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Bhalla PhD, Jennifer Anita
Description: On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of study or emphasis.

Kin 3696 Supervised Practical Experience
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Richardson, Tiffany
Description: On-the-job supervised practical experience in the fields of sport and exercise under a specialist in a particular area of study or emphasis.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Biltz MD, George R
Description: Student-selected clinical or research experience

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Rodgerson PhD, Richard W
Description: Student-selected clinical or research experience

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Buysse PhD, Jo Ann
Description: Student-selected clinical or research experience. Students enrolled in the sport management program cannot use directed readings for any practicum experience.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Lewis PhD, Beth Ann
Description: Student-selected clinical or research experience
Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Vollum,Matt
   Description: Students work with faculty and graduate students on research or scholarly/creative activities. Students usually assist with faculty scholarship or carry out projects of their own under faculty supervision.

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: LaVoi PhD,Nicole Marie
   Description: Student-selected clinical or research experience

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Ingraham PhD,Stacy Jean
   Description: Student-selected clinical or research experience

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Allison JD,Rayla
   Description: Student-selected clinical or research experience. Students enrolled in the sport management program cannot use directed readings for any practicum experience.

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Leon MD,Arthur S
   Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Kane PhD,Mary Jo
   Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Wade PhD,Michael G
   Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Smith,Thomas J
   Description: Directed study in a selected area agreed to by student and instructor, with an emphasis on the areas of human factors/ergonomics, motor performance and behavior, and kinesiology of human systems.
   Style: 100% Discussion.
   Grading: 100% special projects.
   Exam Format: no exams

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Wiese-Bjornstal PhD,Diane M.
   Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.

Kin 3993 Directed Study in Kinesiology
   A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
   Instructor: Konczak PhD,Juergen
   Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.
Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Dengel PhD, Donald Robert
Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Snyder PhD, Eric Michael
Description: Student may contact the instructor or department for information.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Stoffregen PhD, Thomas
Description: For Kinesiology majors who wish to study a topic or problem under tutorial guidance.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Ross PhD, Stephen
Description: Student-selected clinical or research experience. Students enrolled in the sport management program cannot use directed readings for any practicum experience.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Kihl PhD, Lisa A
Description: Student-selected clinical or research experience. Students enrolled in the sport management program cannot use directed readings for any practicum experience.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Bhalla PhD, Jennifer Anita
Description: Students work with faculty and graduate students on research or scholarly/creative activities. Students usually assist with faculty scholarship or carry out projects of their own under faculty supervision.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Weiss PhD, Maureen
Description: Student-selected clinical or research experience

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Richardson, Tiffany
Description: Students work with faculty and graduate students on research or scholarly/creative activities. Students usually assist with faculty scholarship or carry out projects of their own under faculty supervision.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Ji PhD, Li Li
Description: Student may contact the instructor or department for information.

Kin 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Gao PhD, Zan
Description: Student may contact the instructor or department for information.

Kin 3993H Directed Study in Kinesiology: Honors
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Student selected clinical or research experience.
Kin 4001H Honors Seminar in Kinesiology
A-F only, 3 credit(s), max credits 6;  
Instructor: Bhalla PhD, Jennifer Anita  
Description: Contemporary issues in kinesiological research. Laboratory rotations, development of UROP project proposal, development of senior thesis topic, advanced study, career opportunities in Kinesiology, special learning opportunities.

Kin 4133 Perceptual-Motor Control and Learning
A-F only, 3 credit(s);  
Instructor: Stoffregen PhD, Thomas  
Description: Kinesiology 4133 (Perceptual-motor control and learning) is an introduction to the emergence and stabilization of motor skills. The primary focus is on how we are able to coordinate movement -- movement of different parts of the body relative to one another, and movement of the body relative to the environment. The class is relevant to students who are interested in movement and development over the lifespan and issues of perception and action, in general. Most students in previous classes have career goals in the fields of human development, education, exercise physiology, or physical rehabilitation. Kin 4133 is not a course about development or enhancement of athletic abilities, coaching, or sports performance, although we will occasionally discuss examples from these areas. By the end of the course, students will have a broad awareness of many of the factors involved in the perceptual guidance of motor coordination. The class will operate at a fast pace and will require reading of original scientific literature, and brief daily writing assignments.  
Style: 80% Lecture, 5% Discussion, 15% Laboratory.  
Grading: 20% mid exam, 25% final exam, 10% reports/papers, 25% laboratory evaluation, 20% other evaluation. additional exam  
Exam Format: multiple choice, with short essays

Kin 4134 The Aging Motor System
A-F only, 3 credit(s);  
Instructor: Wade PhD, Michael G  
Description: Impact of aging on the motor system and its influence on activities of daily living (ADL); posture, falls, participation in physical activity, performance operating personal transportation systems. Effects of aging (behavioral and biological) on coordination/control and its related perceptual-cognitive correlates.

Kin 4385 Exercise Physiology
A-F only, 4 credit(s);  
Instructor: STAFF  
Description: Effects of exercise on physiological systems of human body. Energy/nutritional requirements of exercise, exercise prescription, athletic conditioning, ergo-genics aids, exercise in environmental extremes, gender/heritability factors related to adaptation to training

Kin 4385 Exercise Physiology
A-F only, 4 credit(s);  
Instructor: Dengel PhD, Donald Robert  
Description: Information and learning experiences will be presented that cover specific areas within the discipline of Exercise Physiology. This course is designed for the advanced undergraduate student in Kinesiology, as well as advanced students in such complementary areas as public health, nutrition, physiology, biology, biochemistry, or any sport-related areas. It creates a great opportunity to combine the science of biological, biochemistry, physics, and physiology with the study of health, fitness, wellness, human performance, and sport. Emphasis is placed on basic human physiological systems and the responses of those systems to the challenge of physical activity: from moderate to extreme intensities. The biochemical bases of these responses will be presented. Historical, psychological, sociological, and philosophical implications of these topics will be integrated into many of the lecture/discussions. In addition to lecture information, students will be provided a "hands on", small group laboratory experience that is carefully orchestrated to track lecture material and presentations.

Kin 4641 Training and Conditioning for Sport
A-F only, 3 credit(s);  
Instructor: Ingraham PhD, Stacy Jean  
Description: This course prepares the student to systematically design training and conditioning programs for athletes. This course utilizes periodization models with physiological adaptations to maximize human performance in the athletic arena.  
Style: 80% Lecture, 20% Discussion.  
Grading: 26% final exam, 10% reports/papers, 39% special projects, 16% written homework, 3% in-class presentation, 6% problem solving.
Kin 4697 Student Coaching and Seminar
S-N only, 3 credit(s);
Instructor: Ingraham PhD, Stacy Jean
Description: Practicum with coinciding seminars.

Kin 4941 Applied Sport Science
OPT No Aud, 3 credit(s);
Instructor: Fitzgerald, John S
Description: Introduction to varied contributions of sport sciences to athletic performance. Evaluation of historical research's contributions toward modern day research questions.

Kin 4981 Understanding Kinesiology Research
A-F only, 3 credit(s);
Instructor: STAFF
Description: Prepares students to critically analyze research specific to Kinesiology.

Kin 4981 Understanding Kinesiology Research
A-F only, 3 credit(s);
Instructor: Lewis PhD, Beth Ann
Description: At the completion of this course the student will be able to analyze research specific to (1) The research question; (2) the study design; (3) qualitative methods; (4) quantitative methods; (5) limitations of the research; and (6) implications of the research specific to Kinesiology. Students will also be able to: (1) demonstrate a basic understanding of statistics and the application to research; (2) distinguish between the interpretation of the journal abstract and the implications of the entire research document; (3) present a critique of a peer-reviewed journal article. The course consists of two research article critiques (2-3 pages), one exam, one proposal project paper (7-8 pages), and a group project presentation.

Kin 4981 Understanding Kinesiology Research
A-F only, 3 credit(s);
Instructor: Schuver, Katie Jo
Description: Prepares students to critically analyze research specific to kinesiology.

Kin 5001 Foundations of Human Factors/Ergonomics
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HUMF 5001;
Instructor: Smith, Thomas J
Description: The course will address these issues in the following contexts: Consumer Product Design; Cognitive Performance and Learning, Psychomotor Performance, Behavioral Cybernetics of Human Performance; Effects of Perturbed Sensory Feedback on Performance; Machine and Tool Performance; Interactive Performance with Complex Technological Systems (Human/Computer; Human/Robot); Occupational Performance and Safety; Social and Team Performance; Organizational Performance; and Performance of Complex Sociotechnical Systems (Aerospace, Educational, Manufacturing, Transportation, Community and Health Systems. Field tours of selected private sector operations are provided to complement classroom activities. Course assignments encompass a series of class presentations, reports, and term projects dealing with HF/E analyses of consumer product design, design of complex sociotechnical systems and job/workplace design features and issues. The course represents the core course in the campus-wide, interdisciplinary Human Factors Minor Program, and is intended for graduate and upper-level undergraduate students with an interest in the conceptual and practical aspects of HF/E science.
Style: 40% Lecture, 10% Discussion. student team presentations & field trips
Grading: 80% reports/papers, 20% in-class presentation.
Exam Format: no exams

Kin 5104 Physical Activities for Persons with Disabilities
A-F only, 3 credit(s);
Instructor: Healy MA, Kathleen Dalton
Description: "Physical Activity for Persons with Disabilities" investigates strategies and interventions for physical activity and movement skills for people of all ages; from early childhood through adulthood. The class explores twelve major disability classifications and specific learning styles. There is an opportunity to hear first hand, from people with disabilities, teachers and
community partners, about their opportunities to participate in physical activities and sports. The class provides knowledge about development adapted physical education (DAPE) curriculum and services as well as in depth information about planning, adapting and implementing an adapted physical education program. Topics: movement behavior foundations, movement skill progressions, unique considerations for specific impairments, inclusion in physical activities and sport for persons with disabilities

**Style:** 40% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Demonstration, 10% Guest Speakers.

**Grading:** 20% mid exam, 20% final exam, 20% reports/papers, 20% additional semester exams, 10% reflection paper, 10% class participation.

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**Kin 5111 Sports Facilities**

**A-F only, 3 credit(s):**

**Instructor:** Turman PhD, James C

**Description:** An overview of sports facilities including the planning, development, design, construction, and management of such facilities with emphasis on major indoor multipurpose facilities for recreational sports, physical education, and intercollegiate athletics on the college campus and an introduction to public/private arenas and stadiums. Other topic areas may include funding and financing, operations management, marketing, advertising, public relations, and risk management.

**Style:** 35% Lecture, 20% Discussion, 15% Small Group Activities, 10% Student Presentation, 15% Field Trips, 5% Guest Speakers.

**Grading:** 17% final exam, 35% reports/papers, 25% special projects, 5% quizzes, 13% written homework, 5% attendance. Note: attendance also includes in-class presentation and participation.

**Exam Format:** multiple choice, fill-in, matching, and essay

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**Kin 5122 Applied Exercise Physiology**

**A-F only, 3 credit(s):**

**Instructor:** Snyder PhD, Eric Michael

**Description:** Student may contact the instructor or department for information.

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**Kin 5136 Psychology of Coaching**

**3 credit(s):**

**Instructor:** LaVoi PhD, Nicole Marie

**Description:** The course is broken down into two components. The first component focuses on helping coaches (and other sport practitioners) develop skills in creating a climate where optimal development, optimal performance and optimal experience occur simultaneously—across all competitive levels. Topics covered in this component include coaching philosophy, leadership, communication skills, motivation, and team building. The second component introduces psychological skills training (PST) and ways in which coaches can implement PST in their programs for performance enhancement. This is an applied course. Kin 3126 is strongly recommended as a pre-requisite. This course is invaluable and highly recommended for students in the coaching minor, and for UG and Graduate students who are currently coaching or intend to coach. Individuals in the Armed Forces also find this course relevant to leadership and aspects of optimal performance. Experienced coaches (i.e., coaches with some or many years of coaching) find the course insightful and transformative. This course is relevant for anyone who manages, motivates, and tries to help individuals attain optimal performance in any context—not just sports.

**Style:** 50% Lecture, 5% Film/Video, 15% Discussion, 5% Laboratory, 10% Small Group Activities, 5% Student Presentation, 5% Guest Speakers, 5% Web Based. The course is taught using blended learning and different teaching pedagogies aimed at actively engaging students.

**Grading:** 15% final exam, 20% reports/papers, 50% reflection paper, 5% in-class presentation, 10% class participation.

**Exam Format:** short answer, case study, essay

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**Kin 5141 Nutrition for Health and Physical Performance**

**A-F only, 3 credit(s):**

**Instructor:** Leon MD, Arthur S

**Description:** Requirements and physiologic roles of nutrients and physical activity in promotion of health and performance; assessment of energy requirements. RDAs, food composition and safety, weight management, and prevention of chronic diseases with emphasis on coronary heart disease. Lectures and slide presentations, take-home project self-assessing one's own usual diet and exercise habits. Target audience: advanced undergraduate and graduate students with science background, preferably with a previous nutrition course, majors and non-majors in Kinesiology.

**Style:** 90% Lecture, 10% Web Based.

**Grading:** 50% mid exam, 10% Web Based.

**Exam Format:** Multiple choice and short answer

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**Kin 5196 Practicum: Developmental/Adapted Physical Education**

**S-N only, 1-4 credit(s), max credits 4, 4 completions allowed:**

**Instructor:** Braun MA, Jessica
Description: Observation of, participation in physical education instruction for students with disabilities. Current issues in developmental/adaptive physical education. Exchange of ideas/problems.

Kin 5204 Methods in Health Education
A-F only, 3 credit(s);
Instructor: Johnson, Bonnie Ruth Young
Description: Student may contact the instructor or department for information.

Kin 5205 Health Education Curriculum
A-F only, 3 credit(s);
Instructor: Johnson, Bonnie Ruth Young
Description: Student may contact the instructor or department for information.

Kin 5461 Foundations of Sport Management
A-F only, 3 credit(s);
Instructor: Schull, Vicki Denise
Description: Student may contact the instructor or department for information.

Kin 5505 Human-Centered Design - Principles and Applications
3 credit(s); Credit will not be granted if credit has been received for: KIN 3505;
Instructor: Smith, Thomas J
Description: Human-centered design (also termed user-centered design, usability engineering, human engineering or universal design) is an interdisciplinary area of design study that focuses on how design can be tailored to address, accommodate, and meet human expectations, capabilities, needs, and limitations. The rationale for the course is that: ‘good design makes things work better and last longer, helps make people and business more productive, and reduces discomfort and waste.’ The basic premise for the course is that ‘good’ design means human-centered design (HCD). The course will address this premise from a number of different perspectives, considering HCD of fabricated artifacts, human-computer interfaces, built environments, and complex sociotechnical and organizational systems and environments. The course will offer a diverse mix of lecture, open discussion, design analysis projects, guest speakers, field site visits and evaluations, and differing cultural approaches to design.
Style: 40% Lecture, 20% Discussion. student team presentations
Grading: 75% reports/papers, 25% in-class presentation.

Kin 5511 Sport and Gender
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: REC 5511;
Instructor: Buysse PhD, Jo Ann
Description: The primary purpose of this course is to provide students with an opportunity to critically examine, understand and appreciate women's involvement in-and contributions to-sport and physical activity from a sociological perspective. Students will be expected to analyze, critique, and evaluate a wide range of historical, cultural, economic and socio-psychological issues that have shaped the nature and scope of women's participation in sport, physical activity and leisure. Utilizing feminist perspectives, particular attention will be given to the various ways in which females (and their bodies) are often viewed as fundamentally different-physically, socially and psychologically-from their male counterparts. Much of this analysis will take place against the backdrop of highly organized, competitive sports such as intercollegiate athletics. Students will read and discuss dominant ideologies centered on masculinity and femininity in order to understand how gender is constructed in and through sport. Finally, social identity markers of race/ethnicity, socio economic class, (dis)ability and sexual orientation, and how they influence participation in and the organization of women's and men's sports will be emphasized. It is expected that students in this course are academically prepared to engage in graduate level coursework. Students will be expected to go beyond surface level knowledge and opinions and engage in critical reading and discussion of research. Students must have the ability to analyze, synthesize and evaluate information in a critically reflective manner. This course will be web enhanced through moodle.
Style: 30% Lecture, 40% Discussion, 20% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 10% in-class presentation, 15% class participation.
Exam Format: essay

Kin 5631 Programming and Promotion in Sport
A-F only, 3 credit(s);
Instructor: Ross PhD, Stephen
Description: While sport promoters can be traced as far back as early 20th century boxing matches, sport marketing as a concept has just recently been credited with the sudden rise in industrial interest. Although the sport industry is still in its early growth period, it has experienced extreme financial prosperity. Largely responsible for the increased popularity and revenue gain of the field is sport marketing. This course is designed to introduce marketing concepts as they apply to the sport industry. Topics such as consumer
behavior, market research, the marketing mix and licensing will be covered through the use of interactive discussion and practical application.

**Kin 5696 Practicum in Kinesiology**

S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;

**Instructor:** STAFF

**Description:** Practical experience in kinesiology under supervision of a University faculty member and an agency supervisor.

**Kin 5720 Special Topics in Kinesiology: Youth Physical Activity & Sedentary Behavior**

3 credit(s), max credits 8, 8 completions allowed;

**Instructor:** Weiss PhD, Maureen

**Description:** Student may contact the instructor or department for information.

**Kin 5723 Psychology of Sport Injury**

3 credit(s);

**Instructor:** Wiese-Bjornstal PhD, Diane M.

**Description:** This course includes content on the psychosocial bases of the following: risk factors preceding sport injury, responses to the occurrence of sport injury, and the rehabilitation process. Content of the course includes both the theoretical and research foundations of sport injury psychology as well as the practical implications of this knowledge. Structure of the course includes lectures, discussions, guest lecturers, videos, and student presentations. The target audience encompasses both sport psychology graduate students and applied practitioners working with sports medicine situations (such as athletic trainers, physical therapists, coaches, and sport psychology consultants). This course will be web enhanced via WebCT.

**Style:** 60% Lecture, 20% Discussion, video and other media; student presentations

**Grading:** 20% mid exam, 20% final exam, 40% reports/papers, 10% in-class presentation, 10% class participation.

**Exam Format:** Mixed method; typically a combination of multiple choice and essay questions

**Kin 5801 Legal Aspects of Sport and Recreation**

A-F only, 4 credit(s);

**Instructor:** Allison JD, Rayla

**Description:** Legal issues related to recreation, park, and sport programs/facilities in public/private sectors.

**Kin 5981 Research Methodology in Kinesiology, Recreation, and Sport**

A-F only, 3 credit(s); 3151 or equiv Credit will not be granted if credit has been received for: REC 5981;

**Instructor:** Kihl PhD, Lisa A

**Description:** Defines/reviews various types of research in exercise and sport science, physical education, and recreation studies. Qualitative research, field studies, and introspective research strategies as alternatives to traditional scientific paradigm.

**Kin 5992 Readings in Kinesiology**

A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;

**Instructor:** Rodgerson PhD, Richard W

**Description:** Independent study under tutorial guidance.

**Kin 5992 Readings in Kinesiology**

A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;

**Instructor:** Buysse PhD, Jo Ann

**Description:** Readings on Globalization theory, Italian language and culture. This course is offered as a preparation for the May Session Global Sport course in Italy. Only students who are taking the May Session Learning Abroad course may sign up for this readings course.

**Style:** 20% Lecture, 60% Discussion, 20% Small Group Activities. meeting once a week for 75 minutes

**Kin 5992 Readings in Kinesiology**

A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;

**Instructor:** Lewis PhD, Beth Ann

**Description:** Independent study under tutorial guidance.

**Kin 5992 Readings in Kinesiology**

A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;

**Instructor:** LaVoi PhD, Nicole Marie
Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ingraham PhD, Stacy Jean
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Allison JD, Rayla
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Leon MD, Arthur S
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Kane PhD, Mary Jo
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Wade PhD, Michael G
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Smith, Thomas J
Description: Directed study of selected readings in kinesiology with an emphasis on the areas of human factors/ergonomics and motor performance and behavior.
Style: 100% Discussion.
Grading: 100% special projects.
Exam Format: no exams

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Wiese-Bjornstal PhD, Diane M.
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Konczak PhD, Juergen
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Dengel PhD, Donald Robert
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Snyder PhD, Eric Michael
Description: Student may contact the instructor or department for information.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Stoffregen PhD, Thomas
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ross PhD, Stephen
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Kihl PhD, Lisa A
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Bhalla PhD, Jennifer Anita
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Weiss PhD, Maureen
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ji PhD, Li Li
Description: Student may contact the instructor or department for information.

Kin 5995 Research Problems in Applied Kinesiology
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Selected topics in physical activity and human performance.

Kin 6596 Clinical Experience I: Physical Education
S-N only, 4 credit(s);
Instructor: Vollum, Matt
Description: Half-day supervised teaching in an urban elementary school physical education setting.

Kin 8128 Doctoral Sport Management Seminar
A-F only, 3 credit(s); PhD student, instr consent Credit will not be granted if credit has been received for: REC 8128;
Instructor: Kihl PhD, Lisa A
Description: Student may contact the instructor or department for information.

Kin 8211 Seminar: Perception and Action
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Kin 8696 Internship: Applied Sport Psychology
S-N only, 3-6 credit(s), max credits 6;
Instructor: Wiese-Bjornstal PhD, Diane M.
Description: Supervised internship; emphasis on educational sport psychology approaches to athletic performance enhancement and psychological adjustment to sport injury.
Kin 8980 Graduate Research Seminar in Kinesiology
S-N only, 1 credit(s), max credits 9, 9 completions allowed;
Instructor: Wiese-Bjornstal PhD, Diane M.
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Biltz MD, George R
Description: Individual scholarly research.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Lewis PhD, Beth Ann
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: LaVoi PhD, Nicole Marie
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ingraham PhD, Stacy Jean
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Allison JD, Rayla
Description: Individual scholarly research.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Leon MD, Arthur S
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Kane PhD, Mary Jo
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Wade PhD, Michael G
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Wiese-Bjornstal PhD, Diane M.
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Konczak PhD, Juergen
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Dengel PhD, Donald Robert
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Snyder PhD, Eric Michael
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Stoffregen PhD, Thomas
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ross PhD, Stephen
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Kihl PhD, Lisa A
Description: Individual scholarly research.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Bhalla PhD, Jennifer Anita
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Weiss PhD, Maureen
Description: Research Problems in Kinesiology

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ji PhD, Li Li
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Gao PhD, Zan
Description: Student may contact the instructor or department for information.

Korean 220 Folwell Hall

Kor 1011 Beginning Korean
5 credit(s); Credit will not be granted if credit has been received for: KOR 4001;
Instructor: Cho, Hangtae
Description: This course is the first of a two-semester sequence of Beginning Korean; it is designed for true beginners or non-heritage learners who have no or little background knowledge of Korean. It aims to begin developing the four communication skills (speaking, listening, reading and writing) in Korean. It covers the basic grammatical structures and vocabulary necessary for basic conversation, reading comprehension, and writing to have the students build a solid foundation for further study in the Korean language. The course also provides useful information concerning culture (where culture touches on language and communication) and everyday life in Korea. After completing this course, a student should be able 1) to maintain simple face-to-face conversation by asking and answering simple questions in Korean, 2) to comprehend the learned materials, 3) to write simple sentences and expressions, and 4) to comprehend simple texts with limited vocabulary.
Kor 1011 Beginning Korean
5 credit(s); Credit will not be granted if credit has been received for: KOR 4001;
Instructor: Johnson, Bryce L.
Description: Student may contact the instructor or department for information.

Kor 3021 Intermediate Korean
5 credit(s); Credit will not be granted if credit has been received for: KOR 4003;
Instructor: Kim, Sugyung
Description: Student may contact the instructor or department for information.

Kor 3031 Third Year Korean
4 credit(s); Credit will not be granted if credit has been received for: KOR 4005;
Instructor: Ryu, Saena
Description: Student may contact the instructor or department for information.

Kor 3290 Korean Language Teaching Tutorial
S-N only, 1 credit(s), max credits 2;
Instructor: Cho, Hangtae
Description: Student may contact the instructor or department for information.

Kor 3993 Directed Studies
1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Cho, Hangtae
Description: Student may contact the instructor or department for information.

Kor 3993 Directed Studies
1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Workman, Travis
Description: Student may contact the instructor or department for information.

Kor 4001 Beginning Korean
3 credit(s); Credit will not be granted if credit has been received for: KOR 1011;
Instructor: Cho, Hangtae
Description: This course is the first of a two-semester sequence of Beginning Korean; it is designed for true beginners or non-heritage learners who have no or little background knowledge of Korean. It aims to begin developing the four communication skills (speaking, listening, reading, and writing) in Korean. It covers the basic grammatical structures and vocabulary necessary for basic conversation, reading comprehension, and writing to have the students build a solid foundation for further study in the Korean language. The course also provides useful information concerning culture (where culture touches on language and communication) and everyday life in Korea. After completing this course, a student should be able 1) to maintain simple face-to-face conversation by asking and answering simple questions in Korean, 2) to comprehend the learned materials, 3) to write simple sentences and expressions, and 4) to comprehend simple texts with limited vocabulary.

Kor 4001 Beginning Korean
3 credit(s); Grad student Credit will not be granted if credit has been received for: KOR 1011;
Instructor: Johnson, Bryce L.
Description: Student may contact the instructor or department for information.

Kor 4003 Intermediate Korean
3 credit(s); Credit will not be granted if credit has been received for: KOR 3021;
Instructor: Kim, Sugyung
Description: Student may contact the instructor or department for information.

Kor 4005 Third Year Korean
3 credit(s); Credit will not be granted if credit has been received for: KOR 3031;
Instructor: Ryu, Saena
Description: Student may contact the instructor or department for information.

Kor 5140 Readings in Sino-Korean Texts
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Cho, Hangtae
Description: This course is designed to increase the students' proficiency to advanced-high level in all aspects of modern Korean with a special emphasis on Sino Korean; Sino-Korean vocabulary and characters are necessary for advanced and superior level of knowledge in Korean. Sino-Korean characters are used differently from the same Chinese characters used in contemporary China in terms of pronunciation, meaning, and word formation. This course aims to prepare students for research or employment in a variety of Korea-related fields. Text materials are drawn from authentic sources including modern Korean literature, film, intellectual history, and readings on contemporary issues. Radio and TV broadcasts will also be included in the teaching materials. Texts will be selected, in part, according to student interests. With the instructor's guidance, students will conduct research projects based on specialized readings in their own fields of study. The research projects will be presented both orally and in written form at the end of the semester. This course will be mostly taught in Korean. 3 repeats are allowed.

Land and Atmospheric Science

LAAS 5050 Integrated Topics in Land & Atmospheric Science
A-F only, 3 credit(s);
Instructor: Nater, Ed
Description: Student may contact the instructor or department for information.

LAAS 5311 Soil Chemistry and Mineralogy
3 credit(s);
Instructor: Toner, Brandy Marie
Description: The course covers the chemical processes that distribute matter among the solid, liquid, and gas phases of soils and sediments. Concepts from inorganic chemistry, aquatic chemistry, and mineralogy are central to the course. Surface chemistry of minerals, aqueous chemistry of metals, the carbonate system, and oxidation-reduction reactions catalyzed by microorganisms are emphasized. The course is designed for advanced undergraduates and graduate students in earth and environmental sciences. Course participants learn in a supportive and collaborative setting through in-class activities, lectures, peer mentoring, and regular problem sets. Please contact Professor Toner to sign up for a discussion section.
Style: We will meet MW 4:00-5:30pm

LAAS 5515 Soil Formation: Earth Surface Processes and Biogeochemistry
A-F only, 3 credit(s);
Instructor: Nater, Ed
Description: Student may contact the instructor or department for information.

LAAS 5515 Soil Formation: Earth Surface Processes and Biogeochemistry
A-F only, 3 credit(s);
Instructor: Nater, Ed
Description: Soil 5515 is an advanced undergraduate/graduate level course covering concepts of soil genesis and development, soil classification, and the distribution of soils across the landscape. The first part of the course uses conceptual and mathematical models to describe the processes and environmental factors affecting the development of soils, their horizons, and their properties. Particular emphasis is placed on development over time; paleosols are used to illustrate some of these points. The second part of the course consists of a brief introduction to the U.S. Soil Taxonomic System. Characteristic properties of individual soil orders are used to further illustrate soil development processes and the geographic distribution of soils. The final portion consists of an advanced treatment of soil--landscape relations and the processes and factors that lead to the distributions observed. This section utilizes GIS and soil landscape modeling to develop these concepts. An introduction to national soils databases and interpretations will be provided. Soil surveys are introduced, both from the viewpoint of making soil maps and their use and interpretation. Three weekend field trips are required: the first is a one-day trip to Cedar Creek Natural History Area; the second is a one-day trip to southeastern Mn.; and the third is a two-day trip through north central and northwestern Mn.
Style: 80% Lecture. Field trips
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 30% special projects.
Exam Format: Essay

LAAS 8128 Land and Atmospheric Science Seminar
S-N only, 1.5 credit(s), max credits 3;
Instructor: Toner, Brandy Marie
Description: The course objectives are to: (1) provide new LAAS students with the skills and experiences required to participate effectively in communication of science as a presenter and audience member; and (2) build a culture of seminar attendance and participation by students. Course philosophy: Conference and seminar presentations are essential professional activities for scientists.
Soil, Water, and Climate faculty are committed to providing students with the tools they need to become effective communicators in these settings. The course will be conducted with the perspective that excellent presentations skills can be learned, and that this learning process is best facilitated in a supportive peer-group setting. We will meet weekly on Tuesday: time and location to be announced.

LAAS 8195 Research Problems in Soils  
1-5 credit(s), max credits 10, 10 completions allowed;  
Instructor: Griffis, Timothy John  
Description: Student may contact the instructor or department for information.

LAAS 8195 Research Problems in Soils  
1-5 credit(s), max credits 10, 10 completions allowed;  
Instructor: Snyder, Peter K  
Description: Student may contact the instructor or department for information.

LAAS 8550 Teaching Experience  
S-N only, 1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Allan, Deborah L  
Description: Student may contact the instructor or department for information.

Landscape Architecture  144 Rapson Hall

LA 1001 Sustainability by Design  
A-F only, 3 credit(s); Meets CLE req of Environment  
Instructor: Schilling, Derek Alexander  
Description: How the Twin Cities region (as an example of many metropolitan areas) can adapt to climate change, depleted energy resources, and other environmental impacts. How cities and places are designed, how places influence sustainable lifestyles. How to adapt the Twin Cities/other cities to a changing world.  
Style: 35% Lecture, 15% Film/Video, 10% Discussion, 10% Small Group Activities, 2% Student Presentation, 20% Guest Speakers, 8% Web Based.

LA 1201 Learning from the Landscape  
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: Nunnally, Patrick  
Description: This course is designed to give students an understanding of why the landscape around us looks the way it does. What do our cities, parks, farms, and small towns say about who we are and what we think is important? How do people make homes for themselves, establish public spaces, and understand the meanings of places in the American landscape? What contributions have various racial, ethnic, and class-based groups made to the contemporary American landscape? Lectures are heavily illustrated, and there are two field exercises that invite students to explore the nearby landscape. Course meets the CLE Cultural Diversity requirement.  
Style: 80% Lecture, 20% Discussion.  
Grading: 2 midterms, 2 exercises, final exam (all 20%), several small homework assignments are also required.  
Exam Format: Short answer

LA 1301 Introduction to Landscape Architecture Drawing  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: LA 5301; Meets CLE req of Arts/Humanities  
Instructor: Larson, John Alfred  
Description: Description: An introductory course that teaches students basic freehand drawing skills; hand drafting techniques, tools and standards; and explores the types of drawings that are typically employed in the Landscape Architecture profession, such as plan, elevation and 3D perspective views. Classroom and homework projects will focus on exploring landscape space and organization through the completion of assigned exercises. Progress will be evaluated and guidance offered during classroom critique. You will be expected to work in class, so be sure that you bring your materials to class unless notified otherwise. The class will consist of classroom drawing exercises, lectures, demonstrations, and review of student's work. Grade: 80% special projects, 20% other evaluation.

LA 1301 Introduction to Landscape Architecture Drawing  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: LA 5301; Meets CLE req of Arts/Humanities  
Instructor: Agee, Bradley Steele
Description: Classroom and homework projects will focus on exploring landscape space and organization through the completion of assigned exercises and work in your sketch journal. Progress will be evaluated and guidance offered during classroom critique. You will be expected to work in class, so be sure that you bring your materials to class unless notified otherwise. The class will consist of classroom drawing exercises, lectures, demonstrations, and reviews of students work. Weekly assignments will typically be given on Monday to be completed Wednesday depending upon the nature of the assignment.

Grading: 60% special projects, 20% laboratory evaluation, 20% other evaluation. Sketch journal

LA 2301 Advanced Representation for Environmental Design
3 credit(s);
Instructor: Weeks,Sarah Katherine
Description: Student may contact the instructor or department for information.

LA 3001 Understanding and Creating Landscape Space
A-F only, 3 credit(s);
Instructor: Agee,Bradley Steele
Description: Introduction to spatial design issues at all scales.

LA 3003 Case Studies in Sustainable Landscape Planning and Design
3 credit(s);Credit will not be granted if credit has been received for: LA 5003;
Instructor: Christensen,Carrie Ann
Description: Student may contact the instructor or department for information.

LA 3571 Landscape Construction: Site Systems and Engineering
A-F only, 3 credit(s);
Instructor: Gunderson,Robert James
Description: Theory applications of landform systems for design. Landform typology, representation methods, manipulation techniques, use of land survey data, earthwork construction issues. Spatial accommodation of vehicles in landscape architecture, including road design.

LA 4096 Internship in Landscape Design and Planning
S-N only, 1 credit(s);
Instructor: Agee,Bradley Steele
Description: Student may contact the instructor or department for information.

LA 4755 Infrastructure, Natural Systems, and Space of Inhabited Landscapes
A-F only, 3 credit(s);credit will not be granted if credit already received for: LA 4712 or 5712 Jr or sr Jr or sr Jr or sr Credit will not be granted if credit has been received for: LA 5755;Meets CLE req of Technology and Society
Instructor: Schilling,Derek Alexander
Description: Student may contact the instructor or department for information.

LA 5001 Sustainable Landscape Design and Planning Practices
3 credit(s);5201, 5203Credit will not be granted if credit has been received for: LA 4001;
Instructor: Rolph,Sandra Gale
Description: Student may contact the instructor or department for information.

LA 5003 Case Studies in Sustainable Landscape Planning and Design
3 credit(s);Credit will not be granted if credit has been received for: LA 3003;
Instructor: Christensen,Carrie Ann
Description: Student may contact the instructor or department for information.

LA 5201 Making Landscape Spaces and Types
A-F only, 6 credit(s);
Instructor: Favour,Joseph Richard
Description: Student may contact the instructor or department for information.

LA 5202 Landscape Analysis Workshop
S-N only, 1 credit(s);
Instructor: Koepke,John Albert
Description: Student may contact the instructor or department for information.

LA 5301 Introduction to Landscape Architecture Drawing
3 credit(s); LA grad student or accelerated B.E.D. student
Credit will not be granted if credit has been received for: LA 1301;
Instructor: Schlepp,Nichole
Description: Student may contact the instructor or department for information.

LA 5371 Computer Methods I
S-N only, 1 credit(s); B.E.D. accelerated status or LA grad or instr consent
Credit will not be granted if credit has been received for: ARCH 5371;
Instructor: Schlepp,Nichole
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin,Roger B
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke,Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepeke,John Albert
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch,Susan M
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Pitt,David George
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar,Lance M
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes,Robert D
Description: Student may contact the instructor or department for information.

LA 5401 Directed Studies in Emerging Areas of Landscape Architecture
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller,Kristine Frances
Description: Student may contact the instructor or department for information.
LA 5401 Directed Studies in Emerging Areas of Landscape Architecture  
1-3 credit(s), max credits 12, 12 completions allowed;  
Instructor: Musacchio,Laura R  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Martin,Roger B  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Krinke,Rebecca Jean  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Koepke,John Albert  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Galatowitsch,Susan M  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Pitt,David George  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Hewitt,Clinton N  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Sykes,Robert D  
Description: Student may contact the instructor or department for information.

LA 5402 Directed Studies in Landscape Architecture History and Theory  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Miller,Kristine Frances  
Description: Student may contact the instructor or department for information.

LA 5403 Directed Studies in Landscape Architecture Technology  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Pitt,David George  
Description: Student may contact the instructor or department for information.
Instructor: Neckar, Lance M
Description: Student may contact the instructor or department for information.

LA 5403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 5403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 5403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Musacchio, Laura R
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar, Lance M
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.
LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 5404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Musacchio, Laura R
Description: Student may contact the instructor or department for information.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin, Roger B
Description: Research, planning, and/or design project. Topics may include energy efficient design, ecological dimension of design, historic preservation, downtown revitalization, agricultural land use, computerized land use planning, transportation and infrastructure housing.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke, Rebecca Jean
Description: Research, planning, and/or design projects. Topics vary.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepke, John Albert
Description: Research, planning, and/or design project. Topics may include energy efficient design, ecological dimensions of design, historic preservation, downtown revitalization, agricultural land use, computerized land use planning, transportation, and infrastructure housing.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch, Susan M
Description: Research, planning, and/or design projects. Topics vary.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Pitt, David George
Description: Research, planning, and/or design projects. Topics vary.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar, Lance M
Description: Research, planning, and/or design projects. Topics vary.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Research, planning, and/or design projects. Topics vary.

LA 5405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.
LA 5405 Interdisciplinary Studies in Landscape Architecture  
   A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;  
   Instructor: Musacchio, Laura R  
   Description: Student may contact the instructor or department for information.

LA 5571 Landscape Construction: Landform Systems and Spatial Performance  
   A-F only, 3 credit(s);  
   Instructor: Favour, Joseph Richard  
   Description: Theory and professional applications of landform systems for design. Topics include typology, representation methods, manipulation techniques, use of land survey data, earthwork construction issues, and spatial accommodation of vehicles in landscape architecture, including road design.

LA 5572 Plants in Design  
   A-F only, 3 credit(s);  
   Instructor: Koepke, John Albert  
   Description: Student may contact the instructor or department for information.

LA 5574 Identification of Minnesota Flora  
   A-F only, 3 credit(s);  
   Instructor: Shaw, Daniel Byron  
   Description: Student may contact the instructor or department for information.

LA 5755 Infrastructure, Natural Systems and the Space of Inhabited Landscapes  
   A-F only, 3 credit(s); Grad student credit will not be granted if credit already received for: LA 4712, LA 5712 Credit will not be granted if credit has been received for: LA 4755;  
   Instructor: Schilling, Derek Alexander  
   Description: Student may contact the instructor or department for information.

LA 8201 Designing Landscapes for Dwelling and Settlement  
   A-F only, 6 credit(s);  
   Instructor: Wilson, Craig A  
   Description: Student may contact the instructor or department for information.

LA 8206 Making Urban Landscape Space  
   A-F only, 6 credit(s);  
   Instructor: Golden, Yamuna Dasi  
   Description: Student may contact the instructor or department for information.

LA 8301 Landscape Architecture: Research Issues and Methods  
   A-F only, 3 credit(s);  
   Instructor: Musacchio, Laura R  
   Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture  
   1-6 credit(s), max credits 12, 12 completions allowed;  
   Instructor: Martin, Roger B  
   Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture  
   1-6 credit(s), max credits 12, 12 completions allowed;  
   Instructor: Krinke, Rebecca Jean  
   Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture  
   1-6 credit(s), max credits 12, 12 completions allowed;  
   Instructor: Koepke, John Albert  
   Description: Student may contact the instructor or department for information.
LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar, Lance M
Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 8401 Directed Studies in Emerging Areas of Landscape Architecture
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Musacchio, Laura R
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar, Lance M
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar, Lance M
Description: Student may contact the instructor or department for information.
LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 8403 Directed Studies in Landscape Architecture Technology
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Musacchio, Laura R
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Musacchio, Laura R
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Neckar, Lance M
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 8405 Interdisciplinary Studies in Landscape Architecture
A-F only, 1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.
LA 8554 Project Programming
A-F only, 1 credit(s), max credits 3, 1 completion allowed;
Instructor: deBritto, Vincent P
Description: This course is focused toward defining the research and design scope of the Capstone project, and gathering and developing site materials for the Capstone Studio (LA8555). This course will emphasize the development of a comprehensive project proposal in preparation for the Capstone Studio. The project proposal will contain the following: A clear and concise description of the concepts (technical, ecological, and cultural) influencing the project, and the limits of the investigation of the concepts; a clear description of site (historical, ecological, and cultural) and relationship of the site to the concept to be explored; a complete inventory of the site materials for the project (list of materials required, sources, format of materials, and availability); an annotated bibliography (list of references and reason for using the reference); a process schedule and scope of work (scope of work, timeline to achieve scope, and process used to achieve scope).
Style: 10% Lecture, 40% Discussion, 40% Small Group Activities, 10% Demonstration.
Grading: 60% reports/papers, 30% special projects, 10% class participation.

LA 8574 Landscape Storm Water Management
A-F only, 3 credit(s);
Instructor: Wedul, Andrea M
Description: Student may contact the instructor or department for information.

Latin 245 Nicholson Hall

Lat 1001 Beginning Latin I
5 credit(s); Credit will not be granted if credit has been received for: LAT 5001;
Instructor: STAFF
Description: Latin, the language of the ancient Romans, has served as a means of communication for well over two thousand years. It is not only the chief language of one of the world's major civilizations, but also an international language for centuries after Rome's fall, the ancestor of the Romance languages, and an important influence on English. The aim of Beginning Latin is to prepare you to read unadapted Latin texts by providing a solid grounding in grammar and vocabulary along with oral and written practice. With this foundation you will be able to read a wide range of ancient, medieval, and Renaissance authors. In addition, Latin 1001 will help strengthen your grasp of English grammar and vocabulary. There is no prerequisite for this course.
Style: 50% Lecture, 50% Discussion. recitation
Exam Format: translation, grammar

Lat 3003 Intermediate Latin Prose
4 credit(s); Grade of at least [C- or S] in [1002 or 5001] or instr consent credit will not be granted if credit already received for: Lat 3113 Credit will not be granted if credit has been received for: LAT 5003;
Instructor: STAFF
Description: An introduction to reading unadapted Latin prose from classical authors such as Caesar, Cicero and Pliny. The course includes some grammar review but also considers literary issues (e.g. conventions of public speaking, Roman letters as a genre) and situates the works we study in their historical context.
Exam Format: Translation/comment

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Sheets, George A
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Olson, S Douglas
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Nappa, Christopher
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Smith, Stephen
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Gallia, Andrew B
Description: Student may contact the instructor or department for information.

Lat 3993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Cole, Spencer E
Description: Student may contact the instructor or department for information.

Lat 4951W Major Project
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

Lat 4951W Major Project
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Nappa, Christopher
Description: Student may contact the instructor or department for information.

Lat 5003 Intermediate Latin Prose: Graduate Student Enrollment
3 credit(s); [Grade of at least C- or S] in [1002 or 5001] or instr consent, grad student credit will not be granted if credit already received for: 3113, 8120 Credit will not be granted if credit has been received for: LAT 3003;
Instructor: Cole, Spencer E
Description: student may contact the instructor or department for information.

Lat 5100 Advanced Reading: The City of Rome: Text and Topography
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Cole, Spencer E
Description: This course will explore the relationship between Latin literature and an especially important context: the city of Rome. Our primary approach will be to consider how ancient Roman authors represent and respond to the material presence of the city. We will also study how Rome becomes a minefield of literary and historical associations. We will explore this vibrant hub of the ancient Mediterranean world from the perspective of the exile, the immigrant, the powerful, and the powerless. Drawing on contemporary theory, we will examine how texts and sites perpetuate collective memory and discuss the role of 'place' in the formation of cultural identity. Through our secondary reading, we will also consider how later authors and artists responded to the symbolic strata of ancient Rome. Readings include selections from Ovid, Horace, Virgil, Cicero, Seneca, and Juvenal.

Lat 5200 Advanced Reading in Later Latin
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Nicholson, Oliver
Description: Cyprian was Bishop of Carthage, the biggest city in Roman North Africa. He died a martyr in the Valerianic Persecution of 258. We know much about him, both as a man who gave up a comfortable life as an orator in the law-courts to be a Christian (and so had all his property confiscated in the persecution of 249-51) and as a fatherly administrator, desperately holding his community together despite the complex pressures exerted by the persecutors. Over 80 of his letters survive as well as a dozen treatises,
including a dialogue with a pagan (both sides of the argument will be considered. We will start with the Life of Cyprian, written by his
deacon and disciple Pontius, the earliest surviving biography of a Christian saint, and with the transcript of the trial at which he was
eventually condemned. Anyone who has done 4 semesters of college Latin (or equivalent - e.g. 4 years of High School) is welcome in
this course. Everyone will write a brief paper on something to do with Cyprian or his age, but the main emphasis will be on reading and
understanding the text in Latin.

Exam Format: Exams will be translation and ‘gobbets’ - passages of text set for comment - explanation in class. The papers will be
brief and on topics chosen by students but agreed with the instructor.

Lat 5800 Sight Reading for Graduate Students
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Sheets, George A
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Olson, S Douglas
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Nappa, Christopher
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Smith, Stephen
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Gallia, Andrew B
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Cole, Spencer E
Description: Student may contact the instructor or department for information.

Lat 8910 Seminar: Aeneid
3 credit(s), max credits 30, 10 completions allowed;
Instructor: Nappa, Christopher
Description: Problems of Interpretation in Vergil's Aeneid The Aeneid is perhaps the most unarguably canonical poem in Western
literature; it is also quite weird. For both of these reasons, mountains of scholarship have been produced on the subject. This seminar
will focus on preparing students to navigate, and more importantly, augment in productive ways, scholarship on Vergil's Aeneid. Class sessions will focus on discussion of selected books of the Aeneid as well as scholarship, both ancient and modern, on the poem. No subfield in the study of Latin literature has such a long and rich history; none has as elaborate and profound a set of critical and philological tools. Few authors have ever served as a litmus test for an academic specialty (only Shakespeare and Dante come to mind for later periods), but, for many years, one could not be called an important Latinist with no work on Vergil, and one could be so called with work predominantly on him. As a group, we will read the whole Aeneid (in English) and (in Latin) four books (chosen in part based on student interest). Each student will also read an additional book in Latin. All work for the course will be based on the Oxford Classical Text by R. A. B. Mynors. Among other topics, we will cover practical matters like the commentary tradition; especially the use of Servius (whom everyone uses, but not always well). We will also discuss a number of currently important topics in the study of the Aeneid (intertextuality, ritual, ethnicity, sexuality) as well as several classic problems that still assert themselves frequently (the poem's politics, structure, morality, and aesthetics). Work in this seminar will culminate in a substantial paper, and report thereon, by students.

Style: 25% Lecture, 50% Discussion, 25% Student Presentation.
Grading: 25% mid exam, 75% reports/papers.

Latin American Studies  214 Social Sciences Tower

LAS 3401W Early Latin America to 1825
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: HIST 3401W; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Weaver Olson, Nathan W
Description: Student may contact the instructor or department for information.

Law School  285 Mondale Hall

Law 6001 Contracts
A-F only, 4 credit(s);
Instructor: Chomsky, Carol L
Description: Student may contact the instructor or department for information.

Law 6001 Contracts
A-F only, 4 credit(s);
Instructor: Matheson, John H
Description: Student may contact the instructor or department for information.

Law 6001 Contracts
A-F only, 4 credit(s);
Instructor: Bix, Brian H
Description: Student may contact the instructor or department for information.

Law 6001 Contracts
A-F only, 4 credit(s);
Instructor: Okediji, Ruth L
Description: Student may contact the instructor or department for information.

Law 6001 Contracts
A-F only, 4 credit(s);
Instructor: Schwarz, Daniel
Description: Student may contact the instructor or department for information.

Law 6003 Legal Research and Writing
P-F only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Weissbrodt, David
Description: Student may contact the instructor or department for information.
Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Feld, Barry C
Description: Student may contact the instructor or department for information.

Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Kritzer, Herbert M
Description: Student may contact the instructor or department for information.

Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Goodwin, Michele Bratcher
Description: Student may contact the instructor or department for information.

Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Roberts, Christopher Nigel
Description: Student may contact the instructor or department for information.

Law 6006 Civil Procedure
A-F only, 3-6 credit(s), max credits 12;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 6007 Constitutional Law
A-F only, 3-6 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 6014 Constitutional Law II
A-F only, 3 credit(s);
Instructor: Hasday, Jill E
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6014 Constitutional Law II
A-F only, 3 credit(s);
Instructor: Goodwin, Michele Bratcher
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6020 Introduction to American Law
A-F only, 2 credit(s);
Instructor: Delapena, Bradford
Description: Student may contact the instructor or department for information.

Law 6021 Seminar: LL.M. Legal Research and Writing
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description: How to conduct legal research, interpret statutes, analyze cases, and write research papers and legal memoranda. Written English, style/form used by U.S. lawyers to present a legal argument.

Law 6025 Wrongful Convictions
A-F only, 2 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html
Law 6030 Contemporary Problems in Freedom on Speech and Press
   A-F only, 3 credit(s); Credit will not be granted if credit has been received for: JOUR 5777;
   Instructor: STAFF
   Description: Student may contact the instructor or department for information.

Law 6037 Seminar: Nanotechnology and Society
   A-F only, 3 credit(s);
   Instructor: Fatehi, Leili
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6039 Great Cases
   A-F only, 3 credit(s);
   Instructor: Stein, Robert A
   Description: See description http://www.law.umn.edu/current/courseguide.html

Law 6048 Financial Market Analysis for Lawyers
   A-F only, 2 credit(s);
   Instructor: Nguyen, Dennis Luan Thuc
   Description: See description http://www.law.umn.edu/current/courseguide.html

Law 6049 Unincorporated Business Associations
   A-F only, 3 credit(s);
   Instructor: McDonnell, Brett H
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6051 Business Associations/Corporations I
   A-F only, 4 credit(s);
   Instructor: STAFF
   Description: See description http://www.law.umn.edu/current/courseguide.html

Law 6053 Analytical Methods
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: See description http://www.law.umn.edu/current/courseguide.html

Law 6057 Judicial Externship
   P-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: See description http://www.law.umn.edu/current/courseguide.html

Law 6058 Human Rights Advocacy
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6061 Financial Regulation
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: McDonnell, Brett H
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6062 Energy Law
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: Ososky, Hari Michele
   Description: This course provides an introduction to U.S. energy law. Part I of the course provides the overall context for energy regulation. It begins by providing an overview of the interplay between the physical grid, energy markets, and regulation. It considers the historical and economic context in which energy law and regulation takes place, with an emphasis on the way in which the physical characteristics of energy resources and markets led to their treatment as natural monopolies and the regulatory consequences of that treatment in public utility law. It also introduces the multi-level, cross-cutting legal framework that regulates energy and its separation
from environmental law. Part II of the course turns to the primary sources of energy in the United States. Because legal fragmentation has led to divergent approaches to different sources of energy, the course examines of the legal regime for each of the major sources of energy: coal, oil, natural gas, nuclear, hydropower, and renewables (wind, solar, biofuels, and geothermal). Part III of the course considers how these sources are used in electricity production. It considers the federal, state, and local law relevant to generation, transmission, and distribution and the increasingly important role that regional transmission organizations play in this regulatory framework. The discussion will include hot topics such as transmission siting and cost-sharing, integrating renewables onto the grid, energy efficiency and conservation, and smart grid. Part IV of the course focuses on the use of these sources in transportation. This part discusses vehicle and fuel regulation, including ways in which the Obama Administration’s implementation of Massachusetts v. EPA is impacting fuel efficiency and tailpipe emissions standards. The course concludes in Part V with an analysis of the future of energy regulation that draws from the previous parts, reflecting upon we might bridge the energy/environment divide and approach multi-level energy governance in a more functional fashion. Grades will be based on a final examination (90%), oral presentations (5%), and class participation (5%). See http://www.law.umn.edu/current/courseguide.html

Law 6063 Law and Neuroscience
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Shen, Francis Xavier
Description: Student may contact the instructor or department for information.

Law 6064 Comparative Corporate Scandals
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Sokol, Daniel
Description: Student may contact the instructor or department for information.

Law 6100 Taxation I
A-F only, 3-4 credit(s);
Instructor: STAFF
Description:

Law 6106 Federal Tax Procedure
A-F only, 2 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6107 Bankruptcy
A-F only, 3 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6117 CL: Civil Rights Enforcement
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Brooker, Gregory Guy
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6118 CL: Criminal Defense Appeals
A-F only, 2 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6119 CL: Criminal Prosecution Appeals
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Nelson, Debra R
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6152 Federal Jurisdiction
A-F only, 3 credit(s);
Instructor: Tostrud, Eric
Description: http://www.law.umn.edu/current/courseguide.html
Law 6153 Wills and Trusts
   A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6202 Conflicts
   A-F only, 3 credit(s);
   Instructor: Cooper, Laura J
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6203 Labor Law
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6207 Antitrust I
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6213 Real Estate Transactions
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6215 Environmental Law
   A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6218 Criminal Procedure
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6219 Evidence
   A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6220 Poverty Law
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6224 Patents
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description:

Law 6226 Juvenile Justice
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description:

Law 6227 Seminar: Products Liability
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
Law 6231 Seminar: Patent Prosecution Practice
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6236 Indian Law
A-F only, 3 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6245 Interviewing, Counseling, and Negotiating
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6247 Depositions
A-F only, 2 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6400 International Environmental Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6402 Food and Drug Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6600 Professional Responsibility
A-F only, 2-3 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6602 International Law
A-F only, 3 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6604 Family Law
A-F only, 3 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6606 Administrative Law
A-F only, 3 credit(s);
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6610 Unfair Competition
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html
Law 6613 Copyright
A-F only, 3 credit(s);
Instructor: Okediji, Ruth L
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6614 American Legal Profession
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Kritzer, Herbert M
Description: http://www.law.umn.edu/current/courseguide.html

Law 6618 Trial Practice
A-F only, 3 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6628 Advanced Trial Practice
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6631 Employment Discrimination
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6632 Employment Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6644 Law and Economics
A-F only, 3 credit(s), max credits 6;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6704 Seminar: Mass Torts: What They Are and How To Resolve Them
A-F only, 2 credit(s);
Instructor: Zimmerman, Charles Selger
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6705 Seminar: Information Governance
A-F only, 2 credit(s);
Instructor: Nelson, Debra R
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6706 Sem: Collective Responsibility
A-F only, 2 credit(s);
Instructor: Jain, Neha
Description: Student may contact the instructor or department for information.

Law 6707 Seminar: Intellectual Property Transactions
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Brown, Gregory C.
Description: Student may contact the instructor or department for information.

Law 6708 Seminar: Law and Terrorism
A-F only, 2 credit(s);
Instructor: Murray, Jane Anne
Law 6801 Seminar: Death Penalty
A-F only, 2 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6805 Community Banking
A-F only, 2 credit(s);
Instructor: Weber, Patrick William
Description: Student may contact the instructor or department for information.

Law 6807 Seminar: Law of Coops
A-F only, 2 credit(s);
Instructor: Kopka, Christopher J
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6809 Seminar: Green Technology and Intellectual Property
A-F only, 2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 6810 Seminar: MBA Concepts for Lawyers
A-F only, 2 credit(s);
Instructor: Adams, Edward Scott
Description: http://www.law.umn.edu/current/courseguide.html

Law 6811 Seminar: Complex Litigation
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6814 Seminar: RICO
A-F only, 2 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6831 Law, Race, and Social Psychology
A-F only, 3 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6833 Alternative Dispute Resolution
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 6834 Seminar: Habeas Corpus
A-F only, 2 credit(s);
Instructor: Thompson, Peter
Description: http://www.law.umn.edu/current/courseguide.html

Law 6837 Seminar: Contract Drafting
A-F only, 2 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html
Law 6848 Seminar: Art of Appelate Advocacy
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6850 Seminar: Criminal Punishment
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6851 Seminar: Advanced Legal Research
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6869 Critical Race Theory
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: Goodwin, Michele Bratcher
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6873 Seminar: Nonprofit Law
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6875 Seminar: Law, Health, and Life Sciences
   P-F only, 1 credit(s);
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6880 Seminar: Election Law
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6884 Seminar: Comparative Constitutional Law
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6886 International Human Rights Law
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6894 Seminar: Sentencing Guidelines
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description: See http://www.law.umn.edu/current/courseguide.html

Law 6897 Seminar: Game Theory
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description: http://www.law.umn.edu/current/courseguide.html

Law 6906 Seminar: Public Law Workshop
   A-F only, 2 credit(s);
   Instructor: STAFF
Law 6909 Seminar: Criminalization
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6910 Seminar: Islamic Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6912 Seminar: Law Firm Practice and Management
A-F only, 2 credit(s);
Instructor: Elsass, Douglas L
Description: http://www.law.umn.edu/current/courseguide.html

Law 6913 Seminar: Tribal Courts in the United States, an Introduction to Indigenous Peoples Law
A-F only, 2 credit(s);
Instructor: Borrows, John
Description: http://www.law.umn.edu/current/courseguide.html

Law 6918 Seminar: Rule of Law
A-F only, 2 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7000 CL: Civil Practice
A-F only, 1-7 credit(s), max credits 7;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7001 CL: Civil Practice Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7003 Seminar: Student Legal Writing Instructor
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7008 Insurance Law Clinic
A-F only, 2-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Brownell, Margo
Description: http://www.law.umn.edu/current/courseguide.html

Law 7010 Clinic: Innocence
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7011 CL: Innocence Director
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.
Law 7012 CL: Environmental Sustainability-Land Use & Water Policy
A-F only, 3-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Nelson, Debra R
Description: http://www.law.umn.edu/current/courseguide.html

Law 7013 CL: Environmental Sustainability Directors
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Coleman, Jean Lynn
Description: http://www.law.umn.edu/current/courseguide.html

Law 7015 Clinic: Worker Rights
A-F only, 2-4 credit(s), max credits 8;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7016 CL: Workers Rights Directors
A-F only, 2 credit(s), max credits 4;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7020 CL: Special Education Law
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7030 CL: Consumer Protection
A-F only, 3-4 credit(s), max credits 8;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7031 CL: Consumer Protection Directors
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7040 CI: Mediation
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Zamoff, Mitchell Eliot
Description: http://www.law.umn.edu/current/courseguide.html

Law 7041 CI: Mediation Directors
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Zamoff, Mitchell Eliot
Description: http://www.law.umn.edu/current/courseguide.html

Law 7055 Maynard Pirsig Moot Court
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7092 CL: Bankruptcy Clinic
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7093 CL: Bankruptcy Clinic Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Law 7098 CL: Indian Child Welfare Act  
A-F only, 1-7 credit(s), max credits 14;  
Instructor: STAFF  
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7099 CL: Indian Child Welfare Clinic Director  
A-F only, 1-4 credit(s), max credits 4;  
Instructor: STAFF  
Description: http://www.law.umn.edu/current/courseguide.html

Law 7400 Clinic: Human Rights Litigation and International Legal Advocacy  
A-F only, 3-7 credit(s), max credits 14;  
Instructor: Green, Jennifer Mary  
Description: See http://www.law.umn.edu/current/courseguide.html

Law 7401 Clinic: Human Rights Litigation and International Legal Advocacy Directors  
A-F only, 1-6 credit(s), max credits 12;  
Instructor: Green, Jennifer Mary  
Description: http://www.law.umn.edu/current/courseguide.html

Law 7501 CL: Misdemeanor Clinic Director  
A-F only, 1-4 credit(s), max credits 4;  
Instructor: STAFF  
Description: http://www.law.umn.edu/current/courseguide.html

Law 7550 CL: Misdemeanor Prosecution  
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: STAFF  
Description: http://www.law.umn.edu/current/courseguide.html

Law 7551 CL: Misdemeanor Prosecution and Defense  
A-F only, 3-6 credit(s), max credits 6, 1 completion allowed;  
Instructor: Smiley, Nicole Patricia  
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project  
P-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Schultz, David A  
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project  
P-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Cox, Prentiss  
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project  
P-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Sanderson, Jean M  
Description: Student may contact the instructor or department for information.

Law 7675 CL: Child Advocacy  
A-F only, 1-7 credit(s), max credits 7;  
Instructor: STAFF  
Description: http://www.law.umn.edu/current/courseguide.html
Law 7676 CL: Child Advocacy Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7842 CL: Immigration and Human Rights
A-F only, 2-7 credit(s), max credits 14;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7843 CL: Immigration Clinic Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7860 CL: Business Law
A-F only, 2-4 credit(s), max credits 8;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7950 CL: Tax Clinic
A-F only, 2-4 credit(s), max credits 4;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Law 7951 CL: Tax Clinic Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: http://www.law.umn.edu/current/courseguide.html

Learning and Academic Skills 104 Eddy Hall

LASk 1001 Mastering Skills for College Success
2 credit(s);
Instructor: Slattery, William Scott
Description: Study smarter ... not harder. Despite being bright and working hard, many students at the U. find they are unable to get the most out of their academic efforts; working hard doesn't always translate into the grades and performance they are looking for. LASk 1001 [Mastering Skills for College Success] was designed to address skills, strategies and approaches to help students become more efficient & effective in their academic efforts. The course focuses on 5 key areas for academic success: 1. Active Learning approaches; 2. Self-awareness & Learning Style; 3. Academic Skills (in areas such as note taking, exams, memory, reading, papers, etc.); 4. Balance Skills (in areas such as time & stress management); and, 5. Engagement & Campus Resources (awareness & utilization). LASk 1001 balances lecture with hands-on application to help students get the most from their efforts.
Style: 40% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Field Trips.
Grading: 12% mid exam, 12% final exam, 16% reports/papers, 38% special projects, 22% reflection paper.

LASk 1001 Mastering Skills for College Success
2 credit(s);
Instructor: Tourek MA, Sam
Description: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success
2 credit(s);
Instructor: Park, Nicole Lee
Description: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success
2 credit(s);
Instructor: Punti, Gemma
**Description:** Student may contact the instructor or department for information.

**LASk 1001 Mastering Skills for College Success**
2 credit(s);
Instructor: Dade, Shari N.
Description: Student may contact the instructor or department for information.

**LASk 1001 Mastering Skills for College Success**
2 credit(s);
Instructor: Kim, Ryoka
Description: Study smarter ... not harder. Despite being bright and working hard, many students at the U. find they are unable to get the most out of their academic efforts; working hard doesn't always translate into the grades and performance they are looking for. LASk 1001 [Mastering Skills for College Success] was designed to address skills, strategies and approaches to help students become more efficient & effective in their academic efforts. The course focuses on 5 key areas for academic success: 1. Active Learning approaches; 2. Self-awareness & Learning Style; 3. Academic Skills (in areas such as note taking, exams, memory, reading, papers, etc.); 4. Balance Skills (in areas such as time & stress management); and, 5. Engagement & Campus Resources (awareness & utilization). LASk 1001 balances lecture with hands-on application to help students get the most from their efforts.
Style: 40% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Field Trips.
Grading: 12% mid exam, 12% final exam, 16% reports/papers, 38% special projects, 22% reflection paper.

**LS 5100 Liberal Studies Seminar: Philanthropy, Development and Strategic Leadership**
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Trow, Tom
Description: Explore the variety of funding sources available to nonprofit organizations, and the strategies employed to acquire and sustain the necessary resources. Investigate and discuss the complexities and nuances of both earned and unearned income for nonprofits, the motives and perspectives of funders and donors, the role of communications strategies in support of fundraising, and the importance of leadership in acquiring resources to sustain and grow a successful organization. Develop both a broad understanding of resources as well as detailed strategies for supporting nonprofit organizations. Participants will interact with leaders from the foundation and nonprofit community during most class sessions, including from the State Arts Board, St. Paul Foundation, TPT, Jerome Foundation, Bush Foundation, etc.
LS 5100 Liberal Studies Seminar: Cultures of Resistance: Popular Movements  
A-F only, 2 credit(s), max credits 24, 24 completions allowed;  
Instructor: Knutson, April A  
Description: Examine the cultures and histories behind the popular uprisings that are sweeping the globe. Videos of these demonstrations of popular resistance to injustice and oppression will be viewed, beginning with a video by Asama Mahfouz that was the catalyst for the actions in Tahir Square. Read and discuss a memoir by Egyptian activist Nawal el Saadawi and an autobiographical novel by Algerian writer Assia Djebar to gain an understanding of the history of colonial and postcolonial oppression in North Africa. Memoirs by James Baldwin and Mary Crow Dog help us understand the history of oppression of African-Americans and Native Americans in the United States. During discussions with activists, past and present, we will compare the current mass movements in the U.S. to the civil rights and anti-war movements of the 1960s.

LS 5100 Liberal Studies Seminar: Art and Sustainability  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Ultan, Roslye B  
Description: &lt;b&gt;Shaping the Future of Place: Public Art as a Crucible for Change and Sustainability&lt;/b&gt; Public art over the past 40 years has evolved from being an art form without walls to shaping the future of place by creating site specific art in collaboration with city planners and design teams to transform communities, intensify investigation between human and natural relationships, between nature and culture, to preserve the heritage of an area, and communicate critically important societal concerns and ideas to the people. Monuments, memorials, parks, civic statuary, street furniture, fountains, lighting and graffiti are the most immediately recognized forms of public art. In addition to these physical objects we include the dance, spectacles like processions, parades, street theater, and other types of performative art. Explore the wide range of connections that public art engenders from its design to encourage public/audience participation as in the early 1980s actions of Josef Beuys in the social/ecological spirit of 7000 Oaks, to the performance/behavioral art of Marcus Young, Wishes for the Sky, 2007, to reinventing public spaces in the contemporary placemaking in Berlin, into supplanting earth art with eco-art or the ecological relationship of human and nature which dates back to Alan Kaprow's 1975, Echo-logy. What role does public art play in the post brave new world of change in the age of Obama? How do artists begin to communicate ideas, ideals, values about the environment, health, education, infrastructure, race, war, global climate warming in a time of economic and political instability? Will percent for art be adequate to sustain and support artistic efforts at state and local levels? Study some of the changes artists experience in the use of wind and solar powered art, web-based environments, media projects, high-tech festivals and interactive installations as public art aims to preserve, restore, define and creatively express community, civic pride and global concerns. Site-specific visits will be scheduled during the semester for hands-on experiences lead by Jack Becker, founder of Forecast, artist/writer/editor, and national/international visionary/leader in the field of Public Art.

LS 5100 Liberal Studies Seminar: Intro to Innovation Studies  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Tomsyck, John Peter  
Description: &lt;b&gt;Introduction to Innovation Studies&lt;/b&gt; This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Presents key Innovation Studies models and demonstrates how these models support individualized learning and leadership processes while being broadly based dynamic and collaborative. The models contribute to innovative self and team leadership strategies, define and apply just-in-time knowledge, and support lifelong self-improvement skills.  
Style: 100% Web Based.  
Grading: 40% reports/papers. -Discussion posts on readings (12%) -Research and discussion posts on innovation Web sites (12%) -10 innovation simulations (10%) -12 skills exercises (12%) -14 evaluations (14%)

LS 5100 Liberal Studies Seminar: Leadership and Change in an Innovation Society  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Crosby, Barbara C  
Description: Change is often built into definitions of leadership, and certainly many scholars and practitioners have written about how leaders can foster change in their organizations or communities. As the U.S. and other countries move more fully into the "innovation economy", understanding the links between leadership and change take on increased urgency. Leaders will need conceptual tools and practical skills to promote innovative organizations that thrive in and contribute to an innovative society. Examine models of change and leadership, and investigate how leaders can promote personal, organizational, and society change. Cases and action research will be emphasized.

LS 5950 Special Topics: Fear  
A-F only, 1 credit(s), max credits 12, 3 completions allowed;  
Instructor: Dikel, William Robert  
Description: Fear, an emotion experienced by all, is well known but little understood. Is it a negative emotion, to be avoided? If so, why are horror movies so popular? Does it exist to protect us from harm? If so, why are some people disabled from phobias such as
Triskaidekaphobia (fear of the number 13) or even Arachibutyrophobia (fear of peanut butter sticking to the roof of the mouth)? This class examines the emotion of fear from multiple perspectives: evolutionary, cultural, neurobiological, psychiatric, theological, and sociological. We will examine fear as an agent of social control, a detriment to our health, a key component of entertainment, and a roadblock to fulfilling our human potential. Through lecture, discussion, and follow-up readings, participants will gain a multidisciplinary perspective on fear, learn to recognize the underpinnings of fear, and learn practical methods of overcoming unnecessary, self-inhibiting fears. This one credit seminar will meet for one day with a paper due 3 to 4 weeks after the meeting day.

**LS 8001 Introduction to Interdisciplinary Inquiry**
A-F only, 3 credit(s);
Instructor: Gustafson, Donna Mae J
Description: Required introductory seminar for admitted MLS students. Emphasizes what individual students need to know or be able to do to successfully complete his or her individually crafted interdisciplinary program, including critical thinking, clear writing, and interdisciplinary research.

**LS 8002 Final Project for Graduate Liberal Studies**
A-F only, 3 credit(s);
Instructor: Lock, Peter William
Description: Students synthesize/complete final project.

**Linguistics S205 Elliott Hall**

**Ling 1701 Language and Society**
4 credit(s);
Instructor: STAFF
Description: When you talk, you give out clues about who you are and where you come from. Sociolinguists have found that patterns of language use are affected by age, gender, socioeconomic status, ethnicity, and other aspects of people and situations. This course reflects on the relationship between language and such social variables. We will also examine multilingual situations such as contact between speakers of different languages, and their implications for language loss and language change. Implications of sociolinguistic findings for educators will also be discussed.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 40% reflection paper.

**Ling 1701 Language and Society**
4 credit(s);
Instructor: Olsen, Caroledith
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The course introduces you to the ways in which sociolinguists study language and what we know about linguistic behavior across languages and cultures. Understanding the relationship between language and society offers a window into human behavior that can enhance almost any endeavor, from teaching, to traveling, to falling in love. At the conclusion of this course, you should be able to: -- identify the features of language that vary with context, and how they vary; -- identify the social dimensions that affect language choices; -- understand how social and linguistic variables interact and result in particular ways of speaking; -- distinguish how these variables and their consequences are instantiated in a variety of cultures; and -- evaluate sociolinguistic data and discussion.
Style: Online with handwritten exams
Grading: 25% mid exam, 25% final exam, 15% reports/papers, 35% written homework.
Exam Format: Two supervised, in-person (not online) exams.

**Ling 3001 Introduction to Linguistics**
4 credit(s); Credit will not be granted if credit has been received for: LING 3001H; Meets CLE req of Social Sciences
Instructor: STAFF
Description: This course is a general introduction to the various subfields of linguistics, the discipline devoted to the nature of human language, its basis in cognition, and its role in human affairs. The main emphasis in the course will be on the structural components of language: syntax (phrase and sentence structure), morphology (word structure), phonology (sound structure), and semantics/pragmatics (meaning). Students will learn about how human languages can differ from one another and how they are alike; they will also learn basic techniques for describing and analyzing linguistic data through working on examples taken from various languages of the world. An understanding of structural components of language will also serve as the basis for an introduction to subfields of linguistics concerned with how languages change over time (historical linguistics, the nature and cause of regional and social variation and diversity within a given language (sociolinguistics), how languages are learned by children and by adults learning a second language (language acquisition), and the biological basis of language in the brain (neurolinguistics). The course will be conducted through lectures and discussions. Course requirements include regular assignments, a midterm and a final. Target audience
is anyone with an interest in the nature of human language.

**Style:** 80% Lecture, 20% Discussion.

**Grading:** 30% mid exam, 35% final exam, 35% problem solving.

**Exam Format:** Short answer

### Ling 3001H Honors: Introduction to Linguistics

A-F only, 4 credit(s); Honors candidate or instr consent Credit will not be granted if credit has been received for: LING 3001;

**Instructor:** STAFF

**Description:** This course is an introduction to the scientific study of human language. The course offers basic technical skills and foundational concepts required for language analysis, as well as an enhanced awareness of the goals, problems and promise of linguistic inquiry. Emphasis will be on the structure of human language. General questions include: what are the basic properties of human language? How do languages differ and how are they all alike? To what extent is human language part of the biological endowment of all humans and to what extent must it be learned? We will examine data from a variety of languages at the level of sound, sentence structure, meaning and use, exploring variation and similarity both across and within languages. Specific topics include: phonetics and phonology (how do we describe and analyze the sounds and sound patterns of human languages?), morphology and syntax (what are the structures of words and sentences?), semantics and pragmatics (how do we interpret language?) We will also discuss topics in historical-comparative linguistics (how do languages change over time, how are they related to one another and what methods are used in determining such relationships?), language acquisition (how are languages learned, by children as a first language and by children and adults as a second language?), and the relation between language and culture.

### Ling 3051H Honors: Thesis

A-F only, 3 credit(s);

**Instructor:** STAFF

**Description:** Independent research and writing of honors BA thesis, under the guidance of a faculty member selected according to student's topic. Details of work are determined in consultation with faculty advisor. Target audience: Linguistics majors in CLA Honors Program

**Style:** independent research, writing

**Grading:** 100% other evaluation. Research progress as determined by faculty advisor

### Ling 3052V Honors: Thesis

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** A continuation of Ling 3051H, with emphasis on writing final version of thesis. Audience: CLA Honors Linguistics majors.

**Style:** independent research, writing

**Grading:** 100% reports/papers.

### Ling 3101W Languages of the World

3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** In this course we will survey several methods used in the classification of languages, examining genetic and typological classifications in greater depth. We will explore what each reveals about the relationships and range of variation found in the world's languages. The second half of the semester will survey representative languages and language families throughout the world, examining sample languages in greater depth for where they fit into the classification systems examined earlier. In each region studied, specific linguistic phenomena which are particularly well-developed in that region will be examined and compared, as appropriate, to related structures in languages known to class members. Students will investigate a language of their choice in some depth and present their findings in a final course project.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 20% final exam, 30% reports/papers, 20% quizzes, 10% class participation, 20% problem solving.

**Exam Format:** multiple choice, fill-in, matching, short answer

### Ling 3721 Bilingualism

3 credit(s);

**Instructor:** Kent, Kateryna

**Description:** Student may contact the instructor or department for information.

### Ling 4002 Linguistic Analysis

3 credit(s);

**Instructor:** Kac, Michael B

**Description:** This is a postintroductory course in problem-solving techniques for morphology, syntax and phonology. The problems are
drawn from a variety of languages and language families; the emphasis is on identifying and describing significant generalizations in the linguistic data rather than on theoretical issues.

**Style:** 70% Lecture. Small-group problem-solving work in class.

**Grading:** 33% final exam, 66% other evaluation. assignments

**Exam Format:** problems comparable to the ones given on assignments

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**Ling 4202 Syntax II**

3 credit(s); 4201 or 5201 Credit will not be granted if credit has been received for: LING 5202;

**Instructor:** Schueler, David

**Description:** This course is concerned with the concepts and principles that have been of central significance in the recent development of syntactic theory. We will examine the Principles and Parameters (P&P) approach to grammar, with special focus on the "Minimalist Program" (MP). By the end of the course, you should have a knowledge and understanding of some core concepts in syntax (category, feature, constituency, agreement, movement), and of the basic principles of a version of Minimalist syntactic theory. You should have gained an ability to produce an analysis of simple syntactic data using the theory. You should have also developed an ability to follow syntactic arguments made within a coherent theoretical system and to demonstrate an understanding of the relationship between theory and data.

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**Ling 4303 Phonology II**

3 credit(s); Ling 4302W Credit will not be granted if credit has been received for: LING 5303;

**Instructor:** Lubowicz, Anna

**Description:** Student may contact the instructor or department for information.

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**Ling 4901W Major Project Seminar**

S-N only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** This class will provide support for the completion of the senior project /Honors Thesis in Linguistics, by analyzing the structure and organization of linguistics papers and providing a forum for discussion of developmentaland stylistic aspects of the writing process. Students must come to the first class with a project, preferably a previously written course paper that they would like to expand and revise. In case the project does not involve the expansion of a previously written course paper, students are expected to have with them a 6-8 page proposal, outlining the issue(s), previous studies, and the project plan. Target audience: Junior and Senior Linguistics majors.

**Style:** 50% Discussion, 30% Small Group Activities, 20% Student Presentation. Independent research and writing.

**Grading:** 50% reports/papers. 50% class activities

**Exam Format:** None

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**Ling 5001 Introduction to Linguistics**

4 credit(s); grad or instr consent Credit will not be granted if credit has been received for: LING 3001;

**Instructor:** Schueler, David

**Description:** This is an introduction to the field of linguistics at the graduate level. Students may contact the instructor or department for information.

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**Ling 5105 Field Methods in Linguistics I**

4 credit(s);

**Instructor:** Bassene, Mamadou

**Description:** The objective of this course is to provide students with the tools and techniques for collecting, analyzing, organizing linguistic data. You will learn how to acquire information about an unfamiliar language by analyzing data collected using various elicitation techniques. We will work with a native speaker of an under-documented language to unveil its basic structure. We will also discuss various ethical and practical issues involved in fieldwork. At the end of this class, you will be able to (1) collect linguistic data through elicitation, (2) provide an accurate transcription of data, (3) identify the data which are relevant to your research project, (4) evaluate both the data and the techniques by which the data are collected, (5) analyze data, (6) organize data on paper and in a database and you will also be familiar with some of the softwares commonly used in linguistic field research for data management and finally, (7) present the results of your fieldwork on a scholarly paper.

**Style:** 20% Lecture, 30% Discussion, 20% Small Group Activities, 30% Demonstration.

**Grading:** 45% reports/papers, 15% class participation. Final paper 40%

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**Ling 5202 Syntactic Theory II**

3 credit(s); 4201 or 5201 Credit will not be granted if credit has been received for: LING 4202;

**Instructor:** Soh, Hooi Ling

**Description:** This course is concerned with the concepts and principles which have been of central significance in the recent
development of syntactic theory, with special focus on the "Government and Binding" (GB)/"Principles and Parameters" (P&P) approach. We will examine how languages may differ in the way words are organized into phrases and sentences and how they are the same. We will also discuss the differences between GB and the Minimalist Program and the motivations for the shift from GB to the Minimalist Program.

**Style:** 80% Lecture, 20% Discussion.

**Grading:** 35% reports/papers, 5% in-class presentation, 60% problem solving.

**Ling 5205 Semantics**
3 credit(s);

**Instructor:** Reese,Brian Jon

**Description:** An introduction to the study of the meaning of linguistic expressions (words, phrases and sentences). Core semantic notions such as entailment, equivalence, truth conditions, and compositionality are introduced, in addition to basic lexical semantic concepts. Logical languages are explored: e.g., propositions, sentence connectives, negation, predicates and arguments, and quantification; as possible models for meaning in natural language, and extensions are introduced to account for a broader range of quantificational and nominal expressions. Time permitting, we turn to the verbal domain and the interpretation of tense and aspect.

**Style:** 80% Lecture, 20% Discussion.

**Grading:** 25% mid exam, 25% final exam, 45% written homework, 5% attendance.

**Ling 5303 Phonological Theory II**
3 credit(s); 4302W or 5302 or instr consent Credit will not be granted if credit has been received for: LING 4303;

**Instructor:** Karvonen,Daniel

**Description:** This course is intended for those who have completed Phonology I or who otherwise have background in phonology equivalent to an introductory phonology course. The main theoretical framework adopted in this course is Optimality Theory. We'll explore issues in both segmental phonology and prosody, including metrical stress theory. We'll also explore additional issues such as the phonology-morphology interface and reduplication. The main goal of this course is to bring students to the level where they can read and understand published work in phonology, and begin to do their own research. The course will also help students further hone and refine their analytical skills, both in class and in written work.

**Ling 5461 Conversation Analysis**
3 credit(s); 3001 or 3001H or 5001 or instr consent Credit will not be granted if credit has been received for: COMM 5461;

**Instructor:** Bassene,Mamadou

**Description:** Student may contact the instructor or department for information.

**Ling 5900 Topics in Linguistics: Storytelling in Conversation**
3 credit(s), max credits 12, 3 completions allowed;

**Instructor:** Sheldon PhD,Amy

**Description:** Storytelling in Conversation Taught with Anth 5980. Prereq: Introduction to Linguistics, Introduction to Linguistic Anthropology, or equivalent. Description: We will study basic linguistic, pragmatic, and sociolinguistic/interactional features of stories that emerge in everyday spontaneous conversations. We will also study how body engagement coordinates with talk to co-create a story. We will discuss and apply current research on story construction in linguistics, sociolinguistics, anthropological linguistics to story data recorded by students or presented by the instructor. Readings will include work by Labov, Ochs, Schegloff, Jefferson, C. Goodwin, M Goodwin, Thompson, Bucholtz, Georgakopoulou, McNeill, and others. Digital video recordings will be made with equipment that is free of charge, available at SMART Commons (Walter Library). Tools such as VLC, Media Mill, Video Ant, Transana, will be used for data transcription, annotation, analysis, and presentation. Tech support will be provided. No prior tech experience is necessary. The course is taught in a workshop format, and will be enhanced by resources in a high-tech STSS classroom. Students will present data for preliminary analysis in class throughout the semester; discussion and revision will lead to creation of a multimodal end of term written report that integrates text and video. Graduate students can explore a topic of interest with instructor?s guidance and approval. Moodle enhanced. Electronic reserves and text. If you have questions, please contact Professor Amy Sheldon, asheldon@umn.edu

**Style:** 20% Lecture, 25% Discussion, 30% Small Group Activities, 20% Student Presentation, 5% Demonstration.

**Grading:** 50% reports/papers, 20% written homework, 10% attendance, 10% in-class presentation, 10% class participation. No exams.

**Exam Format:** n.a.

**Ling 5931 Morphology and Syntax of Contemporary English**
3 credit(s);

**Instructor:** STAFF

**Description:** This course will offer a step-by-step introduction to the structure of English words and sentences and how one argues for particular analyses. We will make use of grammatical theory, but the focus will be on analyzing and understanding the structural properties of contemporary English. Class sessions will involve both presentations (lectures) with class discussion and group work on data analysis. Electronic text-analysis tools will be used to examine large corpora (texts) of various sorts. Course requirements will
include regular in-class and homework exercises, a mid-term and a final exam, and a research paper (10 to 15 pages in length) due on
the last day of class. For the paper, each student will conduct research on a selected aspect of contemporary English grammar. These
projects will generally involve data collection and analysis and will be reported on orally as well as in the written paper.

**Ling 5993 Directed Study**
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Reese, Brian Jon
Description: Student may contact the instructor or department for information.

**Ling 5993 Directed Study**
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Gundel, Jeanette K
Description: Student may contact the instructor or department for information.

**Ling 5993 Directed Study**
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Soh, Hooi Ling
Description: Student may contact the instructor or department for information.

**Ling 5993 Directed Study**
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Marcotte, Jean-Philippe
Description: Student may contact the instructor or department for information.

**Ling 5993 Directed Study**
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Schueler, David
Description: Student may contact the instructor or department for information.

**Ling 8105 Field Methods in Linguistics I**
4 credit(s), max credits 8;
Instructor: Halpert, Claire Danielle
Description: Student may contact the instructor or department for information.

**Ling 8920 Topics in Language and Cognition**
3 credit(s), max credits 6;
Instructor: Gundel, Jeanette K
Description: Student may contact the instructor or department for information.

**Ling 8991 Independent Study**
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Reese, Brian Jon
Description: Student may contact the instructor or department for information.

**Ling 8991 Independent Study**
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Gundel, Jeanette K
Description: Student may contact the instructor or department for information.

**Ling 8991 Independent Study**
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Schueler, David
Description: Student may contact the instructor or department for information.

**Ling 8991 Independent Study**
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Halpert, Claire Danielle
Description: Student may contact the instructor or department for information.
Management  3-353 Carlson School of Management

Mgmt 1001 Contemporary Management  
A-F only, 3 credit(s);  
Instructor: Doepner-Hove, Stacy  
Description: Student may contact the instructor or department for information.

Mgmt 1001 Contemporary Management  
A-F only, 3 credit(s);  
Instructor: Hydrie, Yelena  
Description: Student may contact the instructor or department for information.

Mgmt 1001 Contemporary Management  
A-F only, 3 credit(s);  
Instructor: Shah, Pri Pradhan  
Description: Student may contact the instructor or department for information.

Mgmt 1001 Contemporary Management  
A-F only, 3 credit(s);  
Instructor: Zellmer-Bruhn, Mary Elizabeth  
Description: Student may contact the instructor or department for information.

Mgmt 1001H Honors: Contemporary Management  
A-F only, 3 credit(s);  
Instructor: Zellmer-Bruhn, Mary Elizabeth  
Description: Student may contact the instructor or department for information.

Mgmt 3001 Fundamentals of Management  
A-F only, 3 credit(s);  
Instructor: Fine, Alan Raymond  
Description: Student may contact the instructor or department for information.

Mgmt 3001 Fundamentals of Management  
A-F only, 3 credit(s);  
Instructor: Fox, Isaac J  
Description: Student may contact the instructor or department for information.

Mgmt 3001 Fundamentals of Management  
A-F only, 3 credit(s);  
Instructor: Kaiser, David  
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. This course is designed for students who intend to work in a business environment. You will begin by learning the basic concepts and terminology of management. As you progress through the course materials, you will begin to understand the components of a manager's job as he or she analyzes and chooses options to benefit the organization. By the time you complete this course, you will begin to understand how the components of a manager's job come together in effective leadership and communication to manage people.  
Style: 100% Web Based.
**Grading:** 14% mid exam, 28% final exam, 8% quizzes. -9 group discussions (18%) -1 individual writing assignment (17%) -1 group project (15%)

**Exam Format:** Online exams

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**Mgmt 3001 Fundamentals of Management**

A-F only, 3 credit(s);  
Instructor: Choi,Yoonhee  
Description: Student may contact the instructor or department for information.

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**Mgmt 3001 Fundamentals of Management**

A-F only, 3 credit(s);  
Instructor: Cummings,Michael  
Description: Student may contact the instructor or department for information.

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**Mgmt 3004 Business Strategy**

A-F only, 3 credit(s); CSOM, soph or jr  
Credit will not be granted if credit has been received for: MGMT 4004W;  
Instructor: Cohen,Anne Noelle  
Description: Student may contact the instructor or department for information.

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**Mgmt 3004 Business Strategy**

A-F only, 3 credit(s); CSOM, soph or jr  
Credit will not be granted if credit has been received for: MGMT 4004W;  
Instructor: Forbes,Daniel P  
Description: Student may contact the instructor or department for information.

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**Mgmt 3010 Introduction to Entrepreneurship**

A-F only, 4 credit(s);  
Instructor: STAFF  
Description: This course provides an overview to students regarding the role of entrepreneurship in our economy and to the process of new venture creation. The course is intended to broadly introduce the set of skills known to have an impact on entrepreneurial success. The students are introduced to various forms of entrepreneurial pursuits including independent start-ups, venturing within established organizations, franchising, and acquiring existing businesses. The course is delivered through formal lecture, guest speakers, group work and a variety of experiential exercises. Key learning objectives: (1) Provide exposure to the role of entrepreneurs in society and potential career paths, (2) Develop individual self-assessment of entrepreneurial interests and capabilities, (3) Examine the new venture creation process and key challenges of launching and growing new businesses, (4) Understand what skills are needed to become an entrepreneur, and (5) Begin to develop the foundational skills required to successfully embark on an entrepreneurial career, such as problem-solving under uncertainty, decision-making with incomplete information, opportunity identification, communication, innovation processes, sales, negotiations, recruitment and staffing, and leadership.

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**Mgmt 3033V Honors: Business Communication**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Littlefield,Holly A  
Description: This section of Mgmt 3033 Business Communication will focus on important business communications concepts like audience analysis, persuasion, correspondence, discussion, presentations, and visual aids. The course will begin by covering these basics. Then you will apply these basics while working in small teams to complete a project for a local non-profit, small community business, or service organization. You will have some choice as to what project you would like to select. You will meet a few times with representatives from that organization, but this is not traditional volunteering. Instead you will be completing a project for the organization the way that an outside consulting team might. Some examples of projects might include creating a marketing plan for the organization, designing a website, surveying clientele to provide customer service recommendations, creating a database, writing brochures, fliers, or other literature, developing a plan to recruit volunteers or new employees. Benefits of taking this section include working with non-profits and small businesses, doing real-life projects, creating documents and projects that will actually be used and can be shown to perspective employers, taking part in community activities, working with diverse groups of people, and becoming aware of community issues and concerns. There is one, outside of class, required lab session for this course.

**Style:** 20% Lecture, 80% Discussion.  
**Grading:** 10% mid exam, 15% reports/papers, 50% special projects, 15% in-class presentation, 10% class participation.  
**Exam Format:** essay

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**Mgmt 3033W Business Communication**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: STAFF
Mgmt 3033W Business Communication
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Littlefield, Holly A
Description: Mgmt 3033--Business Communications fosters students' communication and analytical skills. It helps students become credible professionals who can effectively contribute to organizations and communities and successfully employ a variety of communications strategies and skills. The course combines writing and speaking into a single, semester-long course required of all Carlson School undergraduates. It gives students opportunities to develop critical thinking and applied communications skills using a variety of real world speaking and writing assignments. Students give multiple presentations both individually and in teams; they take part in a case study competition; and they also create a variety of business documents including emails, memos, reports, letters, and PowerPoint decks. This course should help students to: --Communicate credibly and deliver written and spoken messages that are adapted to the specific needs of the audience and situation; --Understand differences in message design; --Employ the persuasive strategies most effective in writing and speaking situations; --Understand the persuasive effect of presenting quantitative information and appealing to audience logic or emotions; --Demonstrate effective nonverbal communication skills; --Critically judge information and information sources; --Build sound arguments, using data and logic, when delivering a persuasive message; --Use technology to increase the effectiveness of communication. There is one, outside of class, required lab session for this course.
Style: 20% Lecture, 80% Discussion.
Grading: 10% mid exam, 40% reports/papers, 5% quizzes, 30% in-class presentation, 15% class participation.

Mgmt 3033W Business Communication
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Syverson MA, JoAnn
Description: BA 3033--Business Communications fosters and enhances students' cognitive abilities and communication skills. It helps students become credible professionals who can effectively contribute to organizations and communities and successfully employ a variety of communications strategies and skills. BA 3033, Business Communications combines writing and speaking into a single, semester-long course required of all Carlson School undergraduates. This course gives students opportunities to develop critical thinking and applied skills through both speaking and writing assignments that simulate real business communication. Students take part in writing, speaking, discussions, team-work and other communications activities. This course should help students to: Communicate credibly and deliver both written and spoken messages that are adapted to the specific needs of the audience and situation; Understand differences in message design and audience interpretation of the various forms of business communication; Realize the persuasive strategies most effective in writing and speaking situations; Understand the persuasive effect of presenting quantitative information and appealing to audience logic or emotions; Demonstrate effective nonverbal communication skills; Critically judge information and information sources; Build sound arguments, using data and logic, when delivering a persuasive message; Use technology to increase the effectiveness of communication.
Style: 20% Lecture, 80% Discussion.
Grading: 10% mid exam, 40% reports/papers, 40% in-class presentation, 10% class participation.

Mgmt 3040 Understanding the International Environment of Firms: International Business
A-F only, 2 credit(s);
Instructor: Vaaler, Paul Martin
Description: Student may contact the instructor or department for information.

Mgmt 3603 Topics: Environmental Issues
A-F only, 3 credit(s); [MATH 1142 or [MATH 1271, MATH 1272]], [APEC 1101 or ECON 1101 or 3261W] Credit will not be granted if credit has been received for: ESPM 3603;
Instructor: Hill, Jason David
Description: Life cycle assessment (LCA) is a tool used in understanding the cradle-to-grave environmental impacts of products, processes, and policies. Students will learn LCA methodology, including goal and scope definition, inventory analysis, impact assessment, interpretation, and application. The course will be taught using numerous case studies. Students will have the opportunity to apply the LCA methodology they learn in lectures, discussions, and other in-class activities to the preparation of a group project on a topic of their choosing.

Mgmt 3604 Topics: Environmental Issues
A-F only, 3 credit(s);
Instructor: Smith, Tim
Description: Student may contact the instructor or department for information.

Mgmt 4002 Managerial Psychology
A-F only, 4 credit(s);
Instructor: Albert, Stuart
Description: Student may contact the instructor or department for information.

Mgmt 4008 Entrepreneurial Management
A-F only, 4 credit(s);
Instructor: Hall PhD, Linda Jean
Description: This course focuses on developing the students ability to manage a business enterprise. It explores how business models change from start-up through maturity, as well as key challenges at each stage of growth. It also explores organizational leadership methodologies as they pertain to stakeholder management, strategic planning, management development, control systems, financial analysis and financing. This course concludes with the employment of course learning through the examination of a live case. Key Learning Objectives: 1) Understand business growth and the typical problems encountered 2) Understand the challenges of a growing business and how to manage growth and change 3) Learn how to assess the interests of key stakeholders and how to manage these relationships 4) Sharpen entrepreneurship skills and competencies of problem-solving, decision-making, communication, innovation, sales, negotiations and leadership

Mgmt 4050 Management of Innovation and Change
A-F only, 2 credit(s);
Instructor: Spruth, Steve
Description: MGMT 4050: Management of Innovation and Change This course focuses on the process of creating innovative new businesses or entrepreneurial ventures. Special attention is paid to understanding the sequence of events that typically unfold among individuals, groups, organizations, and industries as innovations develop from concept through implementation, and what paths along this journey are likely to lead to success and failure. The course is based on concepts and findings from the Minnesota Innovation Research Program and other research studies. Special emphasis is given to understanding the development of organizational learning, leadership, external relationships, infrastructure and implementation during the innovation journey. This course also provides training in diagnostic methods for analyzing cases or problems, arguing proposals, evaluating conceptual models, and implementing solutions. Students get opportunities to apply course topics and methods by diagnosing a case of innovation or entrepreneurial of their own choosing. By learning these concepts and methods students can increase their odds of successfully maneuvering organizational innovation and change journeys.
Style: 20% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation, 10% Guest Speakers, 10% Web Based.
Grading: 50% special projects, 25% in-class presentation, 25% class participation.

Mgmt 4080W Applied Technology Entrepreneurship
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Ganco, Martin
Description: The course will walk you through the process of starting a new technology-based venture from the original idea to commercialization. Through lectures, guest lectures, hands-on exercises and case analyses, you will acquire a set of cross-functional concepts in finance, law, marketing and strategy. These concepts will be rigorously applied to a project focused on the commercialization of a technology-based idea. The class will have a mix of engineering, science and business students. In collaboration with the Office of Technology Commercialization, the students will have an option to work on the commercialization of technologies developed within the University of Minnesota.

Mgmt 4170W New Business Feasibility and Planning
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Fine, Alan Raymond
Description: Student may contact the instructor or department for information.

Mgmt 4171W Entrepreneurship in Action I
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Stavig, John
Description: This 2-semester capstone class offers a unique "hands-on" learning experience to conceive, launch and operate a real startup. Students gain hands-on experience with all aspects of business including sales and marketing, finance and accounting, supply chain, human resources and information technology. Students are encouraged to take risks, learn from their mistakes and continue to improve and refine their business. Additionally, the students gain personal insights on the leadership, communication and organizational behavior issues faced within a real business. During the fall semester, students evaluate and develop potential business opportunities, select the businesses they will operate, determine the resources required and develop a plan to launch the business. During the spring semester, students implement the business plan, operate the business and determine the exit strategy. In addition to receiving support from Carlson faculty and experienced entrepreneurs, students interact with attorneys, bankers, accountants and other professional service providers. Each business receives up to $15,000 in funding and operates out of dedicated space in room 2-
212. Students direct their profits to the University or another non-profit, within a range of acceptable options.

**Mgmt 4500 Senior Seminar in International Business**  
A-F only, 2 credit(s);  
Instructor: Madzar, Svjetlana  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6004 Negotiation Strategies**  
A-F only, 2 credit(s);  
Instructor: Abrams, Lori J  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6004 Negotiation Strategies**  
A-F only, 2 credit(s);  
Instructor: Benraouane, Sid A.  
**Description:** Course Description This course is designed to provide students with an opportunity to learn about negotiation strategies. Managers and leaders in modern organizations are faced with a variety of settings, in which they have to develop a process of negotiating with a variety of stakeholders: employees, suppliers, alliance partners, owners and investors, unions, and customers. While with some partners managers are in direct negotiation, with other partners, managers engage in a subtle negotiation and indirect bargaining. Through a variety of reading, text analysis, discussion and debate, our goal in this class is to understand the process and the context of negotiation, while at the same time develop a negotiation competency that would allow us to use negotiation tactics effectively. Course Format This course will be conducted entirely via Internet. The course is offered in an asynchronous mode, which means that the reading, the questions and the discussion will be all posted online. No face to face meeting and no synchronous (real time virtual) meeting. Requirements Weekly online participation: Between 600-900 words per week (40%) Final online quiz: (30%) Final project (A paper or a case analysis 6-8 pages) (30%)

**Mgmt 6004 Negotiation Strategies**  
A-F only, 2 credit(s);  
Instructor: Hydrie, Yelena  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6031 Industry Analysis and Competitive Strategy**  
A-F only, 4 credit(s);  
Instructor: Wang, Richard D  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6032 Strategic Alliances**  
A-F only, 2 credit(s);  
Instructor: Madzar, Svjetlana  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6033 Managing the Strategy Process**  
A-F only, 2 credit(s);  
Instructor: Fox, Isaac J  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6034 Strategic Leadership**  
A-F only, 2 credit(s);  
Instructor: Pavone, Carla  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6040 International Strategy and Organization**  
A-F only, 2 credit(s);  
Instructor: Madzar, Svjetlana  
**Description:** Student may contact the instructor or department for information.

**Mgmt 6050 Management of Innovation and Change**  
A-F only, 2 credit(s);
Management of Groups: 1132

Mgmt 6084 Management of Groups
A-F only, 2 credit(s);
Instructor: Madzar,Svetlana
Description: Course Description This course is designed to provide students with an opportunity to learn about negotiation strategies. Managers and leaders in modern organizations are faced with a variety of settings, in which they have to develop a process of negotiating with a variety of stakeholders: employees, suppliers, alliance partners, owners and investors, unions, and customers. While with some partners managers are in direct negotiation, with other partners, managers engage in a subtle negotiation and indirect bargaining. Through a variety of reading, text analysis, discussion and debate, our goal in this class is to understand the process and the context of negotiation, while at the same time develop a negotiation competency that would allow us to use negotiation tactics effectively. Course Format This course will be conducted entirely via Internet. The course is offered in an asynchronous mode, which means that the reading, the questions and the discussion will all be posted online. No face to face meeting and no synchronous (real time virtual) meeting. Requirements Weekly online participation: Between 600-900 words per week (40%) Final online quiz: (30%) Final project (A paper or a case analysis 6-8 pages) (30%)

Mgmt 6085 Corporate Strategy
A-F only, 4 credit(s);
Instructor: Shaver,Myles
Description: Student may contact the instructor or department for information.

Mgmt 6100 Topics in Management: Corporate Responsibility
A-F only, 2 credit(s), max credits 4;
Instructor: Shaver,Myles
Description: Student may contact the instructor or department for information.

Mgmt 6305 The International Environment of Business
A-F only, 4 credit(s);
Instructor: Bartlett,David Louis
Description: Student may contact the instructor or department for information.

Mgmt 8301 Seminar in Organizational Behavior
4 credit(s);
Instructor: Shah,Pri Pradhan
Description: Student may contact the instructor or department for information.

Mgmt 8402 Seminar in Strategy Process
4 credit(s);
Instructor: Sapienza,Harry Jack
Description: Student may contact the instructor or department for information.

Management of Technology 510 WBOB

MOT 4001 Leadership, Professionalism and Business Basics for Engineers
A-F only, 2 credit(s);
Instructor: Froggatt,Kirk
Description: MOT 4001 is designed to provide scientists and engineers with a working knowledge of the broader business context within which technical ideas are translated into solutions that address customer needs and deliver commercial value to a firm. The course will broaden students' business knowledge and personal leadership abilities, enabling technical professionals to increase their business impact and career success. This two-credit course will build practical knowledge and skill in personal leadership and professionalism, effective communication, business fundamentals, and the process of innovation (i.e., transforming technical ideas into value creating solutions). The course content and the experiential learning approach are designed to reflect the real world requirements
and challenges technical professionals need to master in order to thrive in collaborative, project team environments. The course instructor has spent 25 years working for global technology companies including HP, Silicon Graphics, Yahoo!, Agilent Technologies, and Ecolab. He brings relevant experience, academic rigor, and a passion for applied learning and development to the classroom.

**Style:** 40% Lecture, 30% Discussion, 30% Small Group Activities.

**Grading:** 20% mid exam, 30% final exam, 35% reports/papers, 15% class participation.

**MOT 8112 Management Accounting**
- **A-F only, 2 credit(s);**
- **Instructor:** Caliendo, Charles Michael
- **Description:** Student may contact the instructor or department for information.

**MOT 8114 Strategic Technology Analysis**
- **A-F only, 2 credit(s);**
- **Instructor:** Carlson, Lockwood
- **Description:** Student may contact the instructor or department for information.

**MOT 8121 Managing Organizations in a Technological Environment**
- **A-F only, 2 credit(s);**
- **Instructor:** Soni, Tarun
- **Description:** Student may contact the instructor or department for information.

**MOT 8133 Communication in a Technical Environment**
- **A-F only, 2 credit(s);**
- **Instructor:** Wilbers, Stephen
- **Description:** Student may contact the instructor or department for information.

**MOT 8212 Developing New Technology Products**
- **A-F only, 2 credit(s);**
- **Instructor:** Carlson, Lockwood
- **Description:** Student may contact the instructor or department for information.

**MOT 8224 Pivotal Technologies**
- **A-F only, 2 credit(s);**
- **Instructor:** Amin, Massoud
- **Description:** Student may contact the instructor or department for information.

**MOT 8233 Strategic Management of Technology**
- **A-F only, 2 credit(s);**
- **Instructor:** Marcus, Alfred A
- **Description:** Student may contact the instructor or department for information.

**MOT 8234 Capstone Project**
- **A-F only, 0.5-2 credit(s), max credits 2;**
- **Instructor:** Laingen, Charles Winslo
- **Description:** Student may contact the instructor or department for information.

**MOT 8900 Conflict Management**
- **0.5 credit(s);**
- **Instructor:** Fiutak, Thomas Richard
- **Description:** Student may contact the instructor or department for information.

**MOT 8910 Corporate Responsibility**
- **A-F only, 1 credit(s);**
- **Instructor:** Marcus, Alfred A
- **Description:** Student may contact the instructor or department for information.

**MOT 8920 Science and Technology Policy**
- **A-F only, 1.5 credit(s);**
Managerial Communications  4-300 Carlson School of Management

MCom 5400 Managerial Communications for the HR Professional
A-F only, 2 credit(s);
Instructor: Bork EdD, Joseph T.
Description: MCOM 5400 Fall 2009 Session A Managerial Communication for Human Resource Professionals Fall 2009 Session A Saturdays: 9:00 a.m. to 3:30 p.m. September 19, 26, October 3, and October 17, 2008 Carlson Room L-122 Instructor: Joseph T. Bork, M.M., Ed.S. Contact: jbork@csom.umn.edu or borkx007@umn.edu Phone: 763-656-3527 Required Presentation Zen, Simple ideas on Presentation Design and Delivery Author: Reynolds, Garr; Edition: ; ISBN: 978-0-321-52565-9 Bring a One Gig or higher flashdrive to each class (We do this so your powerpoint can be loaded on the computer as quickly as possible) Guide to Presentations Author: Munter, Mary; Edition: ; ISBN: 0131755234 Publisher: Prentice Hall PTR GUIDE TO MANAGERIAL COMMUNICATION Author: MUNTER, Mary; Edition: ; ISBN: 9780131467040 Publisher: PEARSON ED The Course: Quite often workplace communication involves memos, directives, policy statements, email notes, website development, and company gatherings. All of these usually are formal and scripted. We will analyze those formal communications, but we will also try to dissect how the audience processes your message, perceives those messages, and then acts upon the information. I have tried to create this learning experience to be one that involves raising your competency in the areas of memo writing, generating oral and written presentations, and management of the infamous "grapevine." The central purpose of this course is to understand the principles of formal and informal communication from both the receiver and the sender within the organization: 1. To learn how to create a formal message to the organization (within an HR environment). 2. To assess how the message will be interpreted (internal and external stakeholders). 3. To identify how many different types of communication vehicles can be used to permeate the organization. 4. To discover and develop how good communication inside and outside of the company can be used as a catalyst towards higher levels of profitability in the organization. 5. To create a system of good communication within the company. Here are some study topics that should be reviewed before taking this course: 1. The communication process. 2. The role of Human Resources within the organization. 3. Organizational behavior. 4. External and Internal stakeholders. Course Requirements: Your Introduction to the class: Within the required textbooks by Garr Reynolds and Dr. Mary Munter several themes resound in each chapter. To be an effective communicator and competent HR professional you are required to lead meetings, act as an advocate for employees in group activities, deliver bad news, and sell ideas to peers and upper management. See the email sent to you prior to class. Project: Style: 10% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 40% Student Presentation, 20% Demonstration. Grading: 20% quizzes, 80% in-class presentation. You will be required to develop a written strategic plan that chronicles a major shift in business practices within the organization and orchestrate a presentation regarding implementation to senior management. The effects of the change will require Exam Format: Quizzes and exams will be short textbook answer with an awesome example attached.

MCom 5500 Strategic Managerial Communication (Comprehensive Course)
A-F only, 4 credit(s), max credits 8;
Instructor: Syverson MA, JoAnn
Description: Student may contact the instructor or department for information.

MCom 5510 Persuasive Writing in Business
A-F only, 2 credit(s);
Instructor: Smith, Sandra S
Description: Student may contact the instructor or department for information.

MCom 5530 Strategies and Skills for Managerial Presentations
A-F only, 2 credit(s);
Instructor: Smith, Sandra S
Description: Student may contact the instructor or department for information.

Manufacturing Operations Management  20 Ruttan Hall

MM 3001 Manufacturing in a Global Economy
A-F only, 3 credit(s);
Instructor: King, William Tyler
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policy, fee, and financial aid information. In today's changing global economy, high-performing manufacturing
operations must function at the intersection of three important dimensions: Leadership, Product Quality, and Innovation. This course breaks down each dimension in detail and explains how all three are interrelated and necessary to achieve sustainable profitability.

**Style:** 100% Web Based.

**Grading:** -1 group charter (2%) -3 group exercises (14%) -15 discussion activities (7%) -6 individual papers (29%) -1 final paper (48%)

**MM 4035 Global Supply Chain Management**

**A-F only, 3 credit(s);**

**Instructor:** Martens, Scott L

**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Processes and technology to manage operations and quality accurately and real-time in a global business environment. Supplier selection, costs of procurement, risk, time management, outsourcing. Current issues and trends.

**Style:** Online

**Grading:** 20% mid exam, 20% final exam, 10% special projects. -12 article questions (10%) -12 module questions (10%) -group participation, based on Peer Evaluation Forms (10%) -self-introduction (required but not graded) -interview report (20%)

**MM 4102 Manufacturing Operations**

**A-F only, 3 credit(s);**

**Instructor:** McNamara, Daniel E

**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Concepts/principles related to management of operations functions. Operations strategy, process, design, just-in-time inventory management, forecasting, scheduling, quality improvement. Relationships between operations and the environment.

**Style:** 100% Web Based.

**Grading:** 26% quizzes, 7% problem solving. -2 group project reports (20%) -2 group project evaluations (10%) -self-introduction (2%) -14 discussions (35%)

**MM 4201 Quality Engineering and Process Improvement**

**A-F only, 3 credit(s);**

**Instructor:** Begich, Michael Daniel

**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Principles and historical foundations of total quality. Best practices of high-performing quality organizations. Role of leadership and strategic planning. How to implement continuous improvement in manufacturing processes and enhance professional competence. Baldrige criteria, ISO 9000 standards, Lean Six Sigma.

**Style:** 100% Web Based.

**Grading:** 15% final exam. -12 online group exercises (23%) -final group project (20%) -self-introduction (2%) -10 individual responses to group exercises (10%) -14 textbook questions exercises (30%)

**Marketing 3-150 Carlson School of Management**

**Mktg 3001 Principles of Marketing**

**A-F only, 3 credit(s);**

**Instructor:** Nelson, Elaine W

**Description:** Student may contact the instructor or department for information.

**Mktg 3001 Principles of Marketing**

**A-F only, 3 credit(s);**

**Instructor:** Upton, Kevin John

**Description:**

**Mktg 3001 Principles of Marketing**

**A-F only, 3 credit(s);**

**Instructor:** Maki, Diane

**Description:** Student may contact the instructor or department for information.

**Mktg 3001 Principles of Marketing**

**A-F only, 3 credit(s);**
Instructor: Mackenzie, Lydia May
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. After taking this course, you'll never look at marketing--whether in the form of advertising, retailing, or personal selling--in quite the same way. You will be introduced to terms, concepts, and skills needed for analyzing marketing problems. The course will help you explore those factors in an outside organization that affect its product, pricing, promotion, and distribution decisions. We will analyze, describe, and discuss cases from actual organizations. At the conclusion of this course, you should be able to: --apply key marketing terms and concepts; --understand and apply the marketing process; --describe how marketing affects our lives; --develop basic analytical skills used in making marketing-related decisions; --discuss marketing strategy alternatives; and --integrate all marketing elements into a written proposal for a marketing plan.
Style: Online
Grading: - Group marketing plan (20%) - Online exercises and quizzes (10%) - Case study discussions (20%) - Exams (33%) - Comprehensive marketing plan (17%)
Exam Format: Online exams

Mktg 3010 Marketing Research
A-F only, 4 credit(s);
Instructor: Van Etten, Julia A.
Description: Student may contact the instructor or department for information.

Mktg 3010 Marketing Research
A-F only, 4 credit(s);
Instructor: Shacham, Rachel
Description: Student may contact the instructor or department for information.

Mktg 3040 Buyer Behavior
A-F only, 4 credit(s);
Instructor: Lipe, Jay
Description: Student may contact the instructor or department for information.

Mktg 4030 Sales Management
A-F only, 4 credit(s);
Instructor: Amaral, Nelson Borges
Description: Student may contact the instructor or department for information.

Mktg 4030 Sales Management
A-F only, 4 credit(s);
Instructor: Campbell, David C
Description: Student may contact the instructor or department for information.

Mktg 4050 Integrated Marketing Communications
A-F only, 4 credit(s);
Instructor: Ahluwalia, Rohini
Description: Student may contact the instructor or department for information.

Mktg 4060 Marketing Channels
A-F only, 4 credit(s);
Instructor: Belich PhD, Thomas James
Description: Student may contact the instructor or department for information.

Mktg 4080W Marketing Strategy
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Redden, Joseph P
Description: This course focuses on how a firm manages its resources and capabilities to maximize customer value and firm profit. Students will learn about several key concepts that form the basis for marketing strategy, as well as the frameworks and tools useful in developing a successful marketing strategy. The topics discussed will include the benefits of being market oriented; the principles of segmentation, targeting, and positioning; product life cycle dynamics; the structural analysis of industries and markets; and the basis of a sustainable competitive advantage. The course will be taught largely using the case method to allow students to step into the shoes of decision-makers in real organizations. The cases are designed to improve the student's ability to analyze a firm's situation,
summarize the critical issues, and justify a particular course of action. Additionally, several short homework assignments have been designed to illustrate specific marketing concepts to the students. The target audience for this course is upper-class undergraduate marketing majors.

**Style:** 40% Lecture, 60% Discussion. 6 short homework assignments (should require less than an hour each)

**Grading:** 25% mid exam, 30% reports/papers, 5% quizzes, 25% class participation, 15% problem solving.

**Exam Format:** short answer

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**Mktg 4082W Brand Management**

A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Torelli, Carlos  
Description: Student may contact the instructor or department for information.

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**Mktg 6051 Marketing Research**

A-F only, 4 credit(s);  
Instructor: Cui, Tony Haitao  
Description: Student may contact the instructor or department for information.

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**Mktg 6055 Buyer Behavior**

A-F only, 4 credit(s);  
Instructor: Otto, Sean D  
Description: Student may contact the instructor or department for information.

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**Mktg 6060 Distribution and Supply Chain Systems**

A-F only, 4 credit(s);  
Instructor: Fitzpatrick, Dana Louise  
Description: Student may contact the instructor or department for information.

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**Mktg 6072 International Marketing**

A-F only, 4 credit(s);  
Instructor: Murray, John A  
Description: An experientially-oriented course dealing with marketing issues and opportunities around the world. Understanding the pros and cons of the global market place and developing programs which will maximize success in these environments. Learning about foreign environments in both developed and developing countries and assessing how to apply the appropriate marketing mix in these environments. Developing an understanding of the complex and varied world outside the United States. The key feature of the course will be working with Minnesota companies to solve an important international marketing problem for them. Students will be divided into groups and assigned companies to work with on this project. These companies have requested help from Carlson to solve an international problem they have faced and have assigned an executive to work with the students. The course uses the case method to analyze how companies have dealt successfully and unsuccessfully with the challenges of marketing in all the major marketing areas of the world. China and India are given special attention as these giant markets are increasingly impacting the global environment.  
Grading: 15% mid exam, 30% final exam, 30% reports/papers, 25% class participation.  
Exam Format: Essay

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**Mktg 6075 Pricing Strategy**

A-F only, 4 credit(s);  
Instructor: Bruce, Robert Burnap  
Description: Student may contact the instructor or department for information.

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**Mktg 6078 Integrated Marketing Communications**

A-F only, 4 credit(s);  
Instructor: Marinovich, John  
Description: This course is organized around the eight main areas of integrated marketing communications; 1) Marketing Objectives; 2) Situation Analysis; 3) Research Strategies; 4) Consumer Behavior; 5) Message Strategies; 6) Creative Strategies; 7) Media Strategies and 8) Promotion Strategies. Students will be expected to apply critical thinking to understand the 'big picture', assess
marketing opportunities, define strategies and evaluate integrated campaigns. The objectives of this course are: 1) to increase understanding of the important issues in planning and evaluating integrated marketing communication campaigns and 2) to apply the appropriate theories, models and other tools to make better marketing communication decisions.

**Mktg 6088 Strategic Marketing**  
A-F only, 2 credit(s);  
Instructor: Hopkins, David K  
Description: Student may contact the instructor or department for information.

**Mktg 6088 Strategic Marketing**  
A-F only, 2 credit(s);  
Instructor: Mueller, Wayne G  
Description: Student may contact the instructor or department for information.

**Mktg 8842 Quantitative Modeling I**  
A-F only, 2 credit(s);  
Instructor: Narasimhan, Om  
Description: Student may contact the instructor or department for information.

**Mktg 8843 Quantitative Modeling II**  
A-F only, 2 credit(s);  
Instructor: Cui, Tony Haitao  
Description: Student may contact the instructor or department for information.

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**Master of Business Administration**  
2-210 Carlson School of Management

**MBA 6030 Financial Accounting**  
A-F only, 3 credit(s);  
Instructor: Kramer, Jack  
Description: Student may contact the instructor or department for information.

**MBA 6030 Financial Accounting**  
A-F only, 3 credit(s);  
Instructor: Zhang, Ivy Xiying  
Description: Student may contact the instructor or department for information.

**MBA 6030 Financial Accounting**  
A-F only, 3 credit(s);  
Instructor: Dey, Aiyeshaa  
Description: Student may contact the instructor or department for information.

**MBA 6035 Managerial Accounting**  
A-F only, 3 credit(s);  
Instructor: Kanodia, Chandra S  
Description: Student may contact the instructor or department for information.

**MBA 6110 Management and Organizational Behavior**  
A-F only, 2 credit(s); MBA student  
Credit will not be granted if credit has been received for: MGMT 6110;  
Instructor: Leroy, Sophie  
Description: Student may contact the instructor or department for information.

**MBA 6120 Data Analysis and Statistics for Managers**  
A-F only, 3 credit(s);  
Instructor: Li, William  
Description: Student may contact the instructor or department for information.
A-F only, 3 credit(s);
Instructor: Huchendorf, Steven Craig
Description: Student may contact the instructor or department for information.

MBA 6140 Managerial Economics
A-F only, 2 credit(s);
Instructor: Waldfogel, Joel
Description: Student may contact the instructor or department for information.

MBA 6150 Managerial Communications
A-F only, 1 credit(s);
Instructor: Holt, Sheryl Lynn
Description: Student may contact the instructor or department for information.

MBA 6150 Managerial Communications
A-F only, 1 credit(s);
Instructor: Littlefield, Holly A
Description: Student may contact the instructor or department for information.

MBA 6210 Marketing Management
A-F only, 3 credit(s);
Instructor: Hansen, Robert A
Description: Student may contact the instructor or department for information.

MBA 6210 Marketing Management
A-F only, 3 credit(s);
Instructor: Mueller, Wayne G
Description: Student may contact the instructor or department for information.

MBA 6220 Operations Management
A-F only, 3 credit(s);
Instructor: McConnell, Brian W
Description: Student may contact the instructor or department for information.

MBA 6220 Operations Management
A-F only, 3 credit(s);
Instructor: Linderman, Kevin Wayne
Description: Student may contact the instructor or department for information.

MBA 6220 Operations Management
A-F only, 3 credit(s);
Instructor: Martens, Scott L
Description: Student may contact the instructor or department for information.

MBA 6230 Financial Management
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

MBA 6300 Strategic Management
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

MBA 6315 The Ethical Environment of Business
A-F only, 2 credit(s);
Instructor: Marcus, Alfred A
Description: Student may contact the instructor or department for information.
MBA 6501 Carlson Funds Enterprise: Growth
  2-4 credit(s), max credits 12, 3 completions allowed;
  Instructor: STAFF
  Description: Student may contact the instructor or department for information.

MBA 6502 Carlson Funds Enterprise: Fixed Income
  2-4 credit(s), max credits 12, 3 completions allowed;
  Instructor: STAFF
  Description: Student may contact the instructor or department for information.

MBA 6503 Carlson Ventures Enterprise
  OPT No Aud, 2-4 credit(s), max credits 12, 3 completions allowed;
  Instructor: Nord, Tobin Lawrence
  Description: Student may contact the instructor or department for information.

MBA 6504 Carlson Consulting Enterprise
  OPT No Aud, 2-4 credit(s), max credits 12, 3 completions allowed;
  Instructor: Gisser, Sarah Smith
  Description: Student may contact the instructor or department for information.

MBA 6505 Carlson Brand Enterprise
  OPT No Aud, 2-4 credit(s), max credits 12, 3 completions allowed;
  Instructor: Hopkins, David K
  Description: Student may contact the instructor or department for information.

Master of Business Taxation 3-110 Carlson School of Management

MBT 5200 Tax Accounting Methods and Periods
  A-F only, 4 credit(s);
  Instructor: STAFF
  Description: This course covers rules affecting timing of income and deductions for tax purposes. Topics include cash and accrual accounting methods overall and with respect to individual items of income and deductions, and rules for changing accounting methods and changing accounting periods.

MBT 5220 Tax Research, Communication, and Practice
  A-F only, 4 credit(s);
  Instructor: Guterman, Paul Gerard
  Description: This is an ambitious, demanding fundamental masters-level course on tax research and IRS practice and procedure. Objectives include: (i) obtaining an overview and understanding of tax research resources, (ii) learning how to use such resources to conduct effective tax research; (iii) learning how to analyze what you find by knowing what different authorities mean in themselves and in relation to each other; (iv) learning the technical materials of Subtitle F of the Code (such as penalties, statute of limitations, interest, etc.); (v) learning how to interpret and resolve conflicting authority; (vi) learning how the IRS audits and the IRS Appeals process including the most effective ways to deal with the IRS; and (vii) learn how to communicate your tax research results. In conjunction with the last objective we do nine different research exercises, including research memos and a protest letter. We also do two editing exercises, including an edit of a fellow student's memo.
  Style: 75% Lecture, 5% Discussion, 20% Small Group Activities.
  Grading: 52% reports/papers, 30% special projects, 18% quizzes.
  Exam Format: There are 3 in-class multiple-choice quizzes that cover the material on IRS Practice and Procedure

MBT 5230 Corporate Taxation I
  A-F only, 2 credit(s);
  Instructor: Conlon, Roger John
  Description: Student may contact the instructor or department for information.

MBT 5346 ASC 740 Computations and Analysis
  A-F only, 2 credit(s);
  Instructor: Frank, Nicholas
MBT 5370 Taxation of Property Transactions
A-F only, 2 credit(s);
Instructor: Miller, Craig Randall
Description: Student may contact the instructor or department for information.

MBT 5380 Tax Aspects of International Business I
A-F only, 2 credit(s);
Instructor: Conlon, Roger John
Description: Student may contact the instructor or department for information.

MBT 5420 Current Topics in Taxation
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Gutterman, Paul Gerard
Description: Student may contact the instructor or department for information.

MBT 5500 Business, Government, and Economic Tax Policy
A-F only, 2 credit(s);
Instructor: Conlon, Roger John
Description: Student may contact the instructor or department for information.

Master of Development Practice

MDP 5001 Ways of Knowing and Sustainable Livelihoods
A-F only, 2 credit(s);
Instructor: Peercy PhD, Chavanne Lenise
Description: Student may contact the instructor or department for information.

Materials Science 151 Amundson Hall

MatS 1001 Advances in Chemical Engineering and Materials Science
S-N only, 1 credit(s); credit will not be granted if credit received for: ChEn 1001; Recommended for [chemical engineering, materials science/engineering] majors Credit will not be granted if credit has been received for: CHEN 1001;
Instructor: Mkhoyan, Andre
Description: Student may contact the instructor or department for information.

MatS 2001 Introduction to the Science of Engineering Materials
A-F only, 3 credit(s);
Instructor: Schott, Jeffrey H.
Description: Student may contact the instructor or department for information.

MatS 2002 Introduction to the Science of Engineering Materials Laboratory
A-F only, 1 credit(s);
Instructor: Schott, Jeffrey H.
Description: Student may contact the instructor or department for information.

MatS 3001 Thermodynamics of Materials
A-F only, 3 credit(s);
Instructor: Wentzcovitch, Renata M
Description: Student may contact the instructor or department for information.

MatS 3011 Introduction to Materials Science and Engineering
3 credit(s);
Instructor: Francis, Lorraine F
Description: Student may contact the instructor or department for information.
MatS 3011 Introduction to Materials Science and Engineering  
3 credit(s);  
Instructor: Francis,Lorraine F  
Description: Student may contact the instructor or department for information.

MatS 3012 Metals and Alloys  
A-F only, 3 credit(s);  
Instructor: Mkhoyan,Andre  
Description: Student may contact the instructor or department for information.

MatS 3013 Electrical and Magnetic Properties of Materials  
A-F only, 3 credit(s);  
Instructor: Holmes,Russell James  
Description: Student may contact the instructor or department for information.

MatS 3041 Industrial Assignment I  
A-F only, 2 credit(s);MatS upper div, completion of required courses in MatS program through fall sem of 3rd yr, GPA of at least 2.80, regis in co-op programCredit will not be granted if credit has been received for: CHEN 3041;  
Instructor: STAFF  
Description: MatS 3041. Industrial Assignment I. (2 cr, MatS upper div, regis in MatS co-op program, completion of required courses in MatS program through Fall semester/3rd yr) First industrial work assignment in engineering co-op program. Evaluation based on formal written report describing the semester's work assignment.  
Style: On-the-job training  
Grading: 100% reports/papers.

MatS 3801 Structural Characterization Lab  
A-F only, 4 credit(s);  
Instructor: Leighton,Chris  
Description: Student may contact the instructor or department for information.

MatS 3801 Structural Characterization Lab  
A-F only, 4 credit(s);  
Instructor: Leighton,Chris  
Description: Student may contact the instructor or department for information.

MatS 4041 Industrial Assignment II  
A-F only, 2 credit(s);3041, completion of required courses in MatS program through fall sem of 4th yr, GPA of at least 2.80, registration in co-op programCredit will not be granted if credit has been received for: CHEN 4041;  
Instructor: STAFF  
Description: MatS 4041. Industrial Assignment II (2 cr., regis in MatS co-op program, completion of required courses in MatS program through Fall semester/yr 4) Second industrial work assignment in MatS co-op program. Application of Materials Science principles to the solution of engineering design problems in an industrial work environment. Evaluation based on formal written report emphasizing design issues derived from work assignment.  
Style: On-the-job training  
Grading: 100% reports/papers.

MatS 4212 Ceramics  
A-F only, 3 credit(s);  
Instructor: Jalan,Bharat  
Description: Student may contact the instructor or department for information.

MatS 4221 Materials Performance  
A-F only, 4 credit(s);  
Instructor: Gerberich,William W  
Description: Student may contact the instructor or department for information.

MatS 4401 Senior Design Thesis I  
A-F only, 2 credit(s);
Instructor: Leighton, Chris  
Description: Student may contact the instructor or department for information.

MatS 4511W Corrosion and Electrochemistry of Corrosion 
A-F only, 4 credit(s); Meets CLE req of Writing Intensive 
Instructor: Shores, David A  
Description: Student may contact the instructor or department for information.

MatS 4511W Corrosion and Electrochemistry of Corrosion 
A-F only, 4 credit(s); Meets CLE req of Writing Intensive 
Instructor: Shores, David A  
Description: Student may contact the instructor or department for information.

MatS 4512 Corrosion and Electrochemistry of Corrosion 
4 credit(s); 
Instructor: Shores, David A  
Description: Student may contact the instructor or department for information.

MatS 4512 Corrosion and Electrochemistry of Corrosion 
4 credit(s); 
Instructor: Shores, David A  
Description: Student may contact the instructor or department for information.

MatS 4591 Independent Study in Materials Science 
OPT No Aud, 1-3 credit(s), max credits 6, 3 completions allowed; 
Instructor: STAFF  
Description: Library, theoretical, laboratory, or design studies of scientific or engineering topics in materials science for an individual student. Course content and credits by arrangement with faculty supervisor. Design credits available if arranged with supervisor. May be used for Upper Division Honors Program experience if arranged with advisor and Honors advisor.

MatS 4593 Directed Study in Materials Science 
A-F only, 1-4 credit(s), max credits 6, 3 completions allowed; 
Instructor: STAFF  
Description: Directed study under faculty supervision. Student should meet with faculty supervisor before registering to arrange study project, grading option, credits, and final report requirements.

MatS 4594 Directed Research in Materials Science 
OPT No Aud, 1-3 credit(s), max credits 6, 3 completions allowed; 
Instructor: STAFF  
Description: Independent laboratory research under faculty supervision. Student should meet with faculty supervisor before registering to arrange research project, credits, grading option, and final report requirements.

MatS 8001 Structure and Symmetry of Materials 
3 credit(s); 
Instructor: Frisbie, C Daniel  
Description: Student may contact the instructor or department for information.

MatS 8002 Thermodynamics and Kinetics 
A-F only, 3 credit(s); 
Instructor: Aydil, Eray S  
Description: Fundamentals of classical thermodynamics with emphasis on solving problems encountered in chemical engineering and materials science. The course is an organized exposition of fundamental concepts and traditional tools that will help chemical engineers and materials scientists understand and analyze the systems they are likely to encounter while conducting original research. 
Style: 100% Lecture.  
Grading: 40% mid exam, 20% final exam, 40% written homework.  
Exam Format: Problem solving with open class notes provided by the instructor and open student notes

MatS 8221 Synthetic Polymer Chemistry
A-F only, 4 credit(s); [Undergrad organic chemistry course, undergrad physical chemistry course] or instr consent Credit will not be granted if credit has been received for: CHEM 4221;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

MatS 8993 Directed Study
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Frisbie, C Daniel
Description: Student may contact the instructor or department for information.

MatS 8994 Directed Research
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Frisbie, C Daniel
Description: Student may contact the instructor or department for information.

Mathematics

Math 1001 Excursions in Mathematics
3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Knoche, Randolph Lee Granheim
Description: Student may contact the instructor or department for information.

Math 1031 College Algebra and Probability
3 credit(s); 3 yrs high school math or satisfactory score on placement exam or grade of at least C- in [PSTL 731 or PSTL 732]
Credit will not be granted if credit has been received for: 1051, 1151, 1155
Credit will not be granted if credit has been received for: MATH 1051; Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: Overview: Linear and quadratic equations and inequalities; graphs of equations, including lines, circles, parabolas, composition, inverses of functions; transformations of graphs; linear, quadratic models; polynomials; exponentials; logarithms; counting; probability. Audience: Business majors wanting to take Math 1142 and elementary education majors wanting to take Math 3113. Also works as prerequisite for Math 1151. Satisfies the CLE Mathematical Thinking requirement.

Math 1031 College Algebra and Probability Submodule
A-F only, 1 credit(s);
Instructor: STAFF
Description: Intended for students who have already had the equivalent of Math 1051 and need the Probability and Counting component of Math 1031. Students take the first part of Math 1031, and their grade is based on their performance up to the first midterm exam. Contact the department to get a permission number into this class. Students will register to Math 1038 but attend a section of Math 1031. Students should choose a section of Math 1031 they wish to attend before contacting the department.

Math 1051 Precalculus I
3 credit(s); 3 yrs of high school math or satisfactory score on placement test or grade of at least C-in [PSTL 731 or PSTL 732]
Credit will not be granted if credit has been received for: 1031, 1151, 1155

Course: MATH 1031
Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: This course assumes that students have a good working knowledge of high school algebra, at least through Algebra II. The course begins with a very brief review of high school algebra. Students needing a more extensive review should register for PsTL 0731 or PsTL 0732 Intermediate Algebra. Topics include linear, quadratic, polynomial, and rational equations and inequalities; graphs of equations, including lines, circles, parabolas, polynomial, rational, exponential, and logarithmic functions; compositions and inverses of functions; transformations of graphs; linear and quadratic models; linear, absolute value, polynomial, rational, exponential, and logarithmic functions, with applications. This course is for students who wish to complete precalculus at a moderate pace; the Math 1051/Math 1151 combination is equivalent to Math 1155 Intensive Precalculus and satisfies the prerequisite for Math 1271 or Math 1371. Math 1051 and Math 1038 essentially equals Math 1031 and satisfies the CLE Mathematical Thinking requirement.
Style: 75% Lecture, 25% Discussion.
Grading: 45% mid exam, 35% final exam, 20% problem solving.
Exam Format: Solve problems such as "Graph f(x) = (x^3 - 1)/(x^2 - 9)"

Math 1051 Precalculus I
3 credit(s); 3 yrs of high school math or satisfactory score on placement test or grade of at least C-in [PSTL 731 or PSTL 732]
Credit will not be granted if credit has been received for: 1031, 1151, 1155
Course: MATH 1031
Meets CLE req of Mathematical Thinking
Instructor: Kinney, Pat
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This is a course in algebra and analytic geometry beyond the usual coverage found in a three-year high school mathematics program. This course is equivalent to Math 1031, College Algebra and Probability. It is a prerequisite for Math 1151, Precalculus II. This course covers topics on solving equations and inequalities, and explores polynomials, rational expressions, exponents, and radicals. The course will also teach you how to solve systems of equations and the use of certain sequences of numbers. You will also learn counting techniques.
Style: This is a printed, correspondence section.
Grading: 40% mid exam, 40% final exam, 20% written homework.
Exam Format: Supervised, in-person exams

Math 1090 College Algebra Short Course
A-F only, 1 credit(s);
Instructor: Ballam, Christian Gary
Description: Student may contact the instructor or department for information.

Math 1090 College Algebra Short Course
A-F only, 1 credit(s);
Instructor: Walia, Rajeev
Description: Student may contact the instructor or department for information.

Math 1111 College Algebra, Trigonometry, and Precalculus
A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Bright, Jered Bryan
Description: Student may contact the instructor or department for information.

Math 1142 Short Calculus
4 credit(s); Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: Overview: A one-semester tour of differential and integral calculus in one variable, and differential calculus in two variables. Does not involve any trigonometry. Emphasis on formulas and their interpretation and use in applications. Audience: Business, architecture, and agricultural science majors, and students who want some exposure to calculus. Does not serve as a prerequisite to any higher math course, but does satisfy the CLE Mathematical Thinking requirement.

Math 1142 Short Calculus
4 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Corbett, John
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This is a course in algebra and analytic geometry beyond the usual coverage found in a three-year high school mathematics program. This course is equivalent to Math 1031, College Algebra and Probability. It is a prerequisite for Math 1151, Precalculus II. This course covers topics on solving equations and inequalities, and explores polynomials, rational expressions, exponents, and radicals. The course will also teach you how to solve systems of equations and the use of certain sequences of numbers. You will also learn counting techniques.
Style: This is a printed, correspondence section.
Grading: 40% mid exam, 40% final exam, 20% written homework.
Exam Format: Supervised, in-person exams
policies, including fee and financial aid restrictions. This course is designed for people who need only a brief introduction to calculus. Its purpose is to teach you the elements of differential and integral calculus, with an emphasis on business, economics, and the social sciences. This course requires proficiency in algebra. Knowledge of trigonometry is not needed. You will be introduced to the ideas of limits of functions at particular points and continuity of functions. These concepts lead to the definitions of derivative and differentiation. You will learn how to differentiate polynomial, rational, exponential, and logarithmic functions. After you master differentiation techniques, you will learn integration of certain functions.

**Style:** This is a printed correspondence section.

**Grading:** 40% mid exam, 40% final exam, 20% written homework.

**Exam Format:** Supervised, in-person (not online) exams

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**Math 1151 Precalculus II**

3 credit(s);

- Satisfactory score on placement exam or grade of at least C- in [1031 or 1051] credit will not be granted if credit received for: Math 1155
- Credit will not be granted if credit has been received for: MATH 1155

Meets CLE req of Mathematical Thinking

**Instructor:** STAFF

**Description:** Overview: Trigonometric functions and inverse trigonometric functions: definitions, graphs, identities, applications; real and complex zeroes of polynomials; polar coordinates; DeMoivre's Theorem; conic sections; solutions of linear systems by substitution and elimination; systems of nonlinear equations and systems of inequalities; arithmetic sequences and geometric series. Audience: Students from Math 1051 or Math 1031 and those that need a little refresher course before going on to calculus, often because of the trig. Satisfies the prerequisite for Math 1271 or Math 1371 and also satisfies the CLE Mathematical Thinking requirement.

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**Math 1155 Intensive Precalculus**

5 credit(s);

- 3 yrs high school math or satisfactory score on placement exam or grade of at least C- in [PSTL 731 or PSTL 732] Credit will not be granted if credit has been received for: Math 1031, 1051, 1151
- Credit will not be granted if credit has been received for: MATH 1151

Meets CLE req of Mathematical Thinking

**Instructor:** Zhao, Longhua

**Description:** Student may contact the instructor or department for information.

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**Math 1161 Statistics and Discrete Mathematics**

A-F only, 3 credit(s);

- Meets CLE req of Mathematical Thinking

**Instructor:** Huq, Aminul

**Description:** Student may contact the instructor or department for information.

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**Math 1161 Statistics and Discrete Mathematics**

A-F only, 3 credit(s);

- Meets CLE req of Mathematical Thinking

**Instructor:** Ballam, Christian Gary

**Description:** Student may contact the instructor or department for information.

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**Math 1161 Statistics and Discrete Mathematics**

A-F only, 3 credit(s);

- Meets CLE req of Mathematical Thinking

**Instructor:** Walia, Rajeev

**Description:** Student may contact the instructor or department for information.

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**Math 1171 Calculus, Modeling, and Data I**
A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Huq, Aminul
Description: Student may contact the instructor or department for information.

Math 1241 Calculus and Dynamical Systems in Biology
4 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Nykamp, Duane Q
Description: An introduction to calculus where the concepts of calculus and related mathematics are introduced through modeling the dynamical behaviors of processes and systems in biology. Mathematical rules capturing the dynamics of living systems provide the basis for introducing elements of calculus. One goal is to elucidate both how mathematics can lead to a deeper understanding of biological systems and how biology can unlock some of the mystery of calculus, dynamical systems, and other areas of mathematics. Compared to a traditional calculus course, Math 1241 will focus less on specific computational techniques and more on the concepts underlying the mathematical tools and their application.

Math 1271 Calculus I
4 credit(s); 4 yrs high school math including trig or satisfactory score on placement test or grade of at least C- in [1151 or 1155] Credit will not be granted if credit has been received for: MATH 1371; Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: Overview: Tangent lines; limits and continuity; differentiation: definition, basic rules, chain rule, rules for trig, exp and log functions; implicit differentiation; rates of change, max-min, related rates problems; 2nd derivative test; curve sketching; linear approximation and differentials; L'Hospital's rule; integration: definition, antidifferentiation, area; simple substitution; volumes of solids by cross sections and shells; work; average value of a function. Audience: The beginning of the standard course for students outside of IT. Also taken by IT students who need to start calculus in the middle of year. Students desiring only one semester of calculus should take Math 1142.

Math 1271 Calculus I
4 credit(s); 4 yrs high school math including trig or satisfactory score on placement test or grade of at least C- in [1151 or 1155] Credit will not be granted if credit has been received for: MATH 1371; Meets CLE req of Mathematical Thinking
Instructor: Nash, Jennie Elizabeth
Description: This is a printed (correspondence) course offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Differential calculus of functions of a single variable, including polynomial, rational, exponential, and trig functions. Applications, including optimization and related rates problems. Single variable integral calculus, using anti-derivatives and simple substitution. Applications may include area, volume, work problems.
Style: Printed correspondence course
Grading: 20% mid exam, 40% final exam, 20% written homework, 20% additional semester exams.

Math 1272 Calculus II
4 credit(s); [1271 or equiv] with grade of at least C-Credit will not be granted if credit has been received for: MATH 1372; Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: Overview: Techniques of integration, including integration by parts, simple trig substitutions, partial fractions. Basic numerical integration; improper integrals; arc length; area of surface of revolution. Separable differential equations, Euler's method, exponential growth and decay. Parametric curves and polar coordinates. Review of conic sections. Sequences and series, comparison and ratio tests, Taylor series and polynomials. Vectors in three dimensions, dot product, cross product, lines, planes, cylinders, quadric surfaces; cylindrical and spherical coordinates. Audience: Part of the standard calculus course for students outside of IT.

Math 1272 Calculus II
4 credit(s); [1271 or equiv] with grade of at least C-Credit will not be granted if credit has been received for: MATH 1372;
Instructor: Hewitt, Harlan A
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course you will study techniques of integration and more applications of integrals. In addition, you will explore the parametric equations of curves and use this system to study more applications of integrals. You will also continue to study polar coordinates. And, you will study some sequences and series. The last major topic of this course is coordinate geometry in three dimensions, which is an introduction to the study of multivariable calculus.
Style: This is a printed, correspondence section.
Grading: 40% mid exam, 40% final exam, 20% written homework.
Exam Format: Supervised, in-person exams
Math 1371 CSE Calculus I
4 credit(s); CSE or pre-bioproduct Concurrent registration is required (or allowed) in biosys engn (PRE), background in [precalculus, geometry, visualization of functions/graphs], instr consent; familiarity with graphing calculators recommended. Credit will not be granted if credit has been received for: MATH 1271; Meets CLE req of Mathematical Thinking.
Instructor: Miracle, Chester L
Description: Student may contact the instructor or department for information.

Math 1372 CSE Calculus II
4 credit(s); Grade of at least C- in [1371 or equiv], CSE or pre-Bioproduct/Biosys Engr Credit will not be granted if credit has been received for: MATH 1272;
Instructor: Witt, Emily E
Description: Please see Syllabus on course website.
Style: 40% Lecture, 60% Small Group Activities.
Grading: 45% mid exam, 30% final exam, 15% quizzes, 5% class participation. 5% Gateway exam.

Math 1571H Honors Calculus I
A-F only, 4 credit(s); Honors student and permission of University Honors Program Credit will not be granted if credit has been received for: MATH 1271; Meets CLE req of Mathematical Thinking.
Instructor: Stinis, Panos
Description: Student may contact the instructor or department for information.

Math 1572H Honors Calculus II
A-F only, 4 credit(s); 1571H, honors student, permission of University Honors Program Credit will not be granted if credit has been received for: MATH 1272;
Instructor: Lewis, Joel Brewster
Description: Student may contact the instructor or department for information.

Math 2243 Linear Algebra and Differential Equations
4 credit(s); [1272 or 1282 or 1372 or 1572] w/grade of at least C-Credit will not be granted if credit has been received for: MATH 2373;
Instructor: STAFF
Description: Overview: The course is divided into two somewhat related parts. Linear algebra: matrices and matrix operations, Gaussian elimination, matrix inverses, determinants, vector spaces and subspaces, dependence, Wronskian, dimension, eigenvalues, eigenvectors, diagonalization. ODE: Separable and first-order linear equations with applications, 2nd order linear equations with constant coefficients, method of undetermined coefficients, simple harmonic motion, 2x2 and 3x3 systems of linear ODE’s with constant coefficients, solution by eigenvalue/eigenvectors, nonhomogenous linear systems; phase plane analysis of 2x2 nonlinear systems near equilibria. Audience: Part of the standard 2nd year calculus course for students outside of IT.

Math 2243 Linear Algebra and Differential Equations
4 credit(s); [1272 or 1282 or 1372 or 1572] w/grade of at least C-Credit will not be granted if credit has been received for: MATH 2373;
Instructor: Hewitt, Harlan A
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You will work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course you will study the concepts of linear algebra and differential
equations. You'll start by examining first-order differential equations and their applications. Then you will study linear algebra with some applications. The last major topic you will study is higher order equations and their application to physics. Before you begin studying the topics of this course, you'll probably find it helpful to review the calculus of one variable.

**Style:** This is a printed correspondence section.

**Grading:** 40% mid exam, 40% final exam, 20% written homework. If you take this course S/N, you must earn at least 70% to receive a grade of S.

**Exam Format:** Supervised, in-person (not online) exams

Math 2263 Multivariable Calculus

4 credit(s);[1272 or 1372 or 1572] w/grade of at least C-Credit will not be granted if credit has been received for: MATH 2374; Instructor: STAFF

Description: Overview: Multivariable calculus: Curves in space, arc length and curvature, velocity and acceleration. Limits and continuity, partial differentiation, local extrema, exact differentials, chain rule, directional derivative and gradient, Lagrange multipliers, 2nd derivative test. Double integration, volume and other applications, polar coordinates, triple integration, cylindrical and spherical coordinates. Vector analysis: Vector fields, line integrals, path independence, Green's Theorem, surface integrals, Theorems of Gauss and Stokes. Audience: Part of the standard 2nd year calculus course for students outside of IT.

Math 2263 Multivariable Calculus

4 credit(s);[1272 or 1372 or 1572] w/grade of at least C-Credit will not be granted if credit has been received for: MATH 2374; Instructor: Hewitt, Harlan A

Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course you will study the concepts of multivariable calculus, an extension of differential and integral calculus. You will start by examining partial derivatives and their application to maxima, minima, rate problems, and approximations. Then you will study double and triple integrals and their applications to volume and mass. The last major topic you will study is vector analysis and its application to the work done by a force, flux, and other physical quantities.

Style: This is a printed correspondence section.

Grading: 40% mid exam, 40% final exam, 20% written homework.

Exam Format: Supervised, in-person exams.

Math 2283 Sequences, Series, and Foundations

3 credit(s);[Concurrent registration is required (or allowed) in 2243 or Concurrent registration is required (or allowed) in 2263 or Concurrent registration is required (or allowed) in 2273 or Concurrent registration is required (or allowed) in 2374] w/grade of at least C-Credit will not be granted if credit has been received for: MATH 3283W; Instructor: Anderson, Greg William

Description: Student may contact the instructor or department for information.

Math 2373 CSE Linear Algebra and Differential Equations

4 credit(s);[1272 or 1282 or 1372 or 1572] w/grade of at least C-, CSE or pre-Bio Prod/Biosys EngrCredit will not be granted if credit has been received for: MATH 2243; Instructor: Miracle, Chester L

Description: Student may contact the instructor or department for information.

Math 2373 CSE Linear Algebra and Differential Equations

4 credit(s);[1272 or 1282 or 1372 or 1572] w/grade of at least C-, CSE or pre-Bio Prod/Biosys EngrCredit will not be granted if credit has been received for: MATH 2243; Instructor: Wang, Ying

Description: Student may contact the instructor or department for information.

Math 2374 CSE Multivariable Calculus and Vector Analysis

4 credit(s);[1272 or 1282 or 1372 or 1572] w/grade of at least C-, CSE or pre-Bioproduct/Biosys EngrCredit will not be granted if credit has been received for: MATH 2263; Instructor: Kim, Jang Soo

Description: Student may contact the instructor or department for information.

Math 2374 CSE Multivariable Calculus and Vector Analysis

4 credit(s);[1272 or 1282 or 1372 or 1572] w/grade of at least C-, CSE or pre-Bioproduct/Biosys EngrCredit will not be granted if credit has been received for: MATH 2263; Instructor: Faye, Gregory
Math 2573H Honors Calculus III
A-F only, 4 credit(s); Math 1572H, honors student and permission of University Honors Program
Credit will not be granted if credit has been received for: MATH 2263;
Instructor: Lawson, Tyler
Description: Student may contact the instructor or department for information.

Math 3171 Bioinformatics and Biostatistics
A-F only, 3 credit(s);
Instructor: Paulik, George Francis
Description: Student may contact the instructor or department for information.

Math 3171 Bioinformatics and Biostatistics
A-F only, 3 credit(s);
Instructor: Metzger, Kelsey Jean
Description: Student may contact the instructor or department for information.

Math 3283W Sequences, Series, and Foundations: Writing Intensive
4 credit(s);
Concurrent registration is required (or allowed) in 2243 or Concurrent registration is required (or allowed) in 2263 or Concurrent registration is required (or allowed) in 2373 or Concurrent registration is required (or allowed) in 2374 w/grade of at least C-Credit will not be granted if credit has been received for: MATH 2283; Meets CLE req of Writing Intensive
Instructor: Rogness, Jonathan Peter
Description: Student may contact the instructor or department for information.

Math 3592H Honors Mathematics I
A-F only, 5 credit(s);
Instructor: Webb, Peter Joseph
Description: Student may contact the instructor or department for information.

Math 4065 Theory of Interest
A-F only, 4 credit(s);
Instructor: Schwartzbauer, Thomas
Description: Student may contact the instructor or department for information.

Math 4065 Theory of Interest
A-F only, 4 credit(s);
Instructor: Richins, Breanne Larsen
Description: Student may contact the instructor or department for information.

Math 4067W Actuarial Mathematics in Practice
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ashkenazi, Rina
Description: Student may contact the instructor or department for information.

Math 4242 Applied Linear Algebra
4 credit(s); 2243 or 2373 or 2573 Credit will not be granted if credit has been received for: MATH 4457;
Instructor: Ni, Wei-Ming
Description: Student may contact the instructor or department for information.

Math 4242 Applied Linear Algebra
4 credit(s); 2243 or 2373 or 2573 Credit will not be granted if credit has been received for: MATH 4457;
Instructor: Sell, George R
Description: (Tentative description) This is the basic course in linear algebra, with applications. Topics include: linear transformations, matrix calculus, solutions of systems of linear equations, null space, range, rank-nullity theorem, orthogonality, orthogonal projections, fundamental theorem of linear algebra, SVD decompositions, bilinear forms, groups of linear operators. Selected Applications, for example: Gram-Schmidt process, Least-squares approximations, computer graphics and perspective.
Style: 100% Lecture.
Exam Format: problem solving

Math 4242 Applied Linear Algebra
4 credit(s); 2243 or 2373 or 2573
Credit will not be granted if credit has been received for: MATH 4457;
Instructor: Prikry, Karel L
Description: Student may contact the instructor or department for information.

Math 4242 Applied Linear Algebra
4 credit(s); 2243 or 2373 or 2573
Credit will not be granted if credit has been received for: MATH 4457;
Instructor: Gomez, Joel I
Description: Student may contact the instructor or department for information.

Math 4242 Applied Linear Algebra
4 credit(s); 2243 or 2373 or 2573
Credit will not be granted if credit has been received for: MATH 4457;
Instructor: Lan, Kai-Wen
Description: Student may contact the instructor or department for information.

Math 4281 Introduction to Modern Algebra
4 credit(s);
Instructor: Sperber, Steven I.
Description: Student may contact the instructor or department for information.

Math 4512 Differential Equations with Applications
3 credit(s);
Instructor: Calderer, Carme
Description: Student may contact the instructor or department for information.

Math 4567 Applied Fourier Analysis
4 credit(s);
Instructor: Cockburn, Bernardo
Description: Student may contact the instructor or department for information.

Math 4603 Advanced Calculus I
4 credit(s);
Instructor: Aristoff, David G
Description: Student may contact the instructor or department for information.

Math 4653 Elementary Probability
4 credit(s);
Instructor: Odlyzko, Andrew
Description: 

Math 4707 Introduction to Combinatorics and Graph Theory
4 credit(s);
Instructor: Kim, Jang Soo
Description: Student may contact the instructor or department for information.

Math 4991 Independent Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Frank, David L
Description: Student may contact the instructor or department for information.

Math 4991 Independent Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Mosher, Bryan
Description: Student may contact the instructor or department for information.
Math 4991 Independent Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Ashkenazi, Rina
Description: Student may contact the instructor or department for information.

Math 4993 Directed Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Fristedt, Bert
Description: Student may contact the instructor or department for information.

Math 4993 Directed Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Siegel, Ronald Alan
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Gray, Lawrence F
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Hernandez, Daniel J
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Scheel, Arnd
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Ruffa, Gregory James
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Anderson, Greg William
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Reiner, Victor Schorr
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Rejto, Peter A
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Richter, Wayne H
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Safonov, Mikhail V
Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Fristedt, Bert
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Baxter, John Robert
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Stanton, Dennis W
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Gray, Lawrence F
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Rogness, Jonathan Peter
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Hernandez, Daniel J
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Odlyzko, Andrew
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Nykamp, Duane Q
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Ashkenazi, Rina
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Akhmedov, Anar
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Wang, Ying
Description: Student may contact the instructor or department for information.
Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive  
Instructor: Holzer, Matt  
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive  
Instructor: Aristoff, David G  
Description: Student may contact the instructor or department for information.

Math 5067 Actuarial Mathematics I
4 credit(s);  
Instructor: Ashkenazi, Rina  
Description: Student may contact the instructor or department for information.

Math 5067 Actuarial Mathematics I
4 credit(s);  
Instructor: Lyle, Aileen Conlon  
Description: Student may contact the instructor or department for information.

Math 5075 Mathematics of Options, Futures, and Derivative Securities I
4 credit(s);  
Instructor: Vinar, Jason Thomas  
Description: Student may contact the instructor or department for information.

Math 5165 Mathematical Logic I
4 credit(s); 2283 or 3283 or Phil 5201 or CSci course in theory of algorithms or instr consent  
Credit will not be granted if credit has been received for: MATH 4152;  
Instructor: Richter, Wayne H  
Description: See the web site for Professor Richter at http://www.math.umn.edu/~richter/

Math 5248 Cryptology and Number Theory
4 credit(s);  
Instructor: Stanton, Dennis W  
Description: Student may contact the instructor or department for information.

Math 5248 Cryptology and Number Theory
4 credit(s);  
Instructor: Odlyzko, Andrew  
Description: Student may contact the instructor or department for information.

Math 5251 Error-Correcting Codes, Finite Fields, Algebraic Curves
4 credit(s);  
Instructor: Clark, David  
Description: Student may contact the instructor or department for information.

Math 5285H Honors: Fundamental Structures of Algebra I
4 credit(s);  
Instructor: Anderson, Greg William  
Description: Student may contact the instructor or department for information.

Math 5335 Geometry I
4 credit(s);  
Instructor: Baxter, John Robert  
Description: Student may contact the instructor or department for information.

Math 5345H Honors: Introduction to Topology
A-F only, 4 credit(s);
Math 5447 Theoretical Neuroscience
4 credit(s);
Instructor: Sperber, Steven I.
Description: Student may contact the instructor or department for information.

Math 5485 Introduction to Numerical Methods I
4 credit(s);
Instructor: Nykamp, Duane Q
Description: Student may contact the instructor or department for information.

Math 5535 Dynamical Systems and Chaos
4 credit(s);
Instructor: Faye, Gregory
Description: Student may contact the instructor or department for information.

Math 5583 Complex Analysis
4 credit(s);
Instructor: Marden, Albert
Description: Student may contact the instructor or department for information.

Math 5587 Elementary Partial Differential Equations I
4 credit(s);
Instructor: Barton, Ariel Elizabeth
Description: Student may contact the instructor or department for information.

Math 5615H Honors: Introduction to Analysis I
4 credit(s);
Instructor: Conn, Jack Frederi
Description: Student may contact the instructor or department for information.

Math 5615H Honors: Introduction to Analysis I
4 credit(s);
Instructor: Gulliver II, Robert D
Description: Student may contact the instructor or department for information.

Math 5615H Honors: Introduction to Analysis I
4 credit(s);
Instructor: Bilyk, Dmytro
Description: Student may contact the instructor or department for information.

Math 5651 Basic Theory of Probability and Statistics
4 credit(s);
Instructor: Stinis, Panos
Description: Student may contact the instructor or department for information.

Math 5651 Basic Theory of Probability and Statistics
4 credit(s);
Instructor: Kemajou, Isabelle
Description: Student may contact the instructor or department for information.
Math 5651 Basic Theory of Probability and Statistics
  4 credit(s);
  Instructor: Sen, Arnab
  Description: Student may contact the instructor or department for information.

Math 5652 Introduction to Stochastic Processes
  4 credit(s);
  Instructor: Zeitouni, Ofer
  Style: 100% Lecture.
  Grading: 10% problem solving, 90% other evaluation. Three exams during term, each 2 hours, each 30% of grade.

Math 5652 Introduction to Stochastic Processes
  4 credit(s);
  Instructor: Joshi, Badal
  Description: Student may contact the instructor or department for information.

Math 5705 Enumerative Combinatorics
  4 credit(s);
  Instructor: White, Dennis E
  Description: Student may contact the instructor or department for information.

Math 5711 Linear Programming and Combinatorial Optimization
  4 credit(s);
  Instructor: Carlsson, John Gunnar
  Description: Student may contact the instructor or department for information.

Math 8001 Preparation for College Teaching
  S-N only, 1 credit(s), max credits 3, 1 completion allowed;
  Instructor: Rogness, Jonathan Peter
  Description: Student may contact the instructor or department for information.

Math 8201 General Algebra
  A-F only, 3 credit(s);
  Instructor: Ciocan-Fontanine, Ionut
  Description: Student may contact the instructor or department for information.

Math 8201 General Algebra
  A-F only, 3 credit(s);
  Instructor: Ciocan-Fontanine, Ionut
  Description: Student may contact the instructor or department for information.

Math 8207 Theory of Modular Forms and L-Functions
  A-F only, 3 credit(s);
  Instructor: Jiang, Dihua
  Description: Student may contact the instructor or department for information.

Math 8211 Commutative and Homological Algebra
  A-F only, 3 credit(s);
  Instructor: Webb, Peter Joseph
  Description: Student may contact the instructor or department for information.

Math 8211 Commutative and Homological Algebra
  A-F only, 3 credit(s);
  Instructor: Webb, Peter Joseph
  Description: Student may contact the instructor or department for information.
Math 8253 Algebraic Geometry  
A-F only, 3 credit(s);  
Instructor: Messing, William  
Description: Student may contact the instructor or department for information.

Math 8271 Lie Groups and Lie Algebras  
A-F only, 3 credit(s);  
Instructor: Conn, Jack Frederi  
Description: Student may contact the instructor or department for information.

Math 8301 Manifolds and Topology  
A-F only, 3 credit(s);  
Instructor: Lawson, Tyler  
Description: Student may contact the instructor or department for information.

Math 8306 Algebraic Topology  
A-F only, 3 credit(s);  
Instructor: Li PhD, Tian-Jun  
Description: Student may contact the instructor or department for information.

Math 8355 Riemannian Geometry  
A-F only, 3 credit(s);  
Instructor: Gulliver II, Robert D  
Description: Student may contact the instructor or department for information.

Math 8401 Mathematical Modeling and Methods of Applied Mathematics  
A-F only, 3 credit(s);  
Instructor: Calderer, Carme  
Description: Student may contact the instructor or department for information.

Math 8401 Mathematical Modeling and Methods of Applied Mathematics  
A-F only, 3 credit(s);  
Instructor: Calderer, Carme  
Description: Student may contact the instructor or department for information.

Math 8441 Numerical Analysis and Scientific Computing  
3 credit(s);  
Instructor: Cockburn, Bernardo
Math 8441 Numerical Analysis and Scientific Computing
3 credit(s);
Instructor: Cockburn, Bernardo
Description: Student may contact the instructor or department for information.

Math 8445 Numerical Analysis of Differential Equations
A-F only, 3 credit(s);
Instructor: Arnold, Douglas N.
Description: Student may contact the instructor or department for information.

Math 8501 Differential Equations and Dynamical Systems I
A-F only, 3 credit(s);
Instructor: Scheel, Arnd
Description: Student may contact the instructor or department for information.

Math 8540 Topics in Mathematical Biology
A-F only, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Mori, Yoichiro
Description: Electrical activity is central to the workings of various physiological systems including the nervous system and the heart. Given its importance and its quantitative nature, electrophysiology has long been a central subject in mathematical biology. In this course, we shall cover some of the fundamental concepts and models in mathematical electrophysiology. After a discussion of the membrane potential and ion channels, we will discuss cell volume control, the Hodgkin-Huxley model of action potential propagation, and mathematical models of cardiac conduction. The course does not assume any background in biology. While the student is expected to have some basic familiarity with ODEs and PDEs, the instructor will introduce the necessary mathematical techniques where required (asymptotic analysis, numerical methods, etc.).

Math 8571 Theory of Evolutionary Equations
A-F only, 3 credit(s);
Instructor: Sell, George R
Description: Student may contact the instructor or department for information.

Math 8571 Theory of Evolutionary Equations
A-F only, 3 credit(s);
Instructor: Sell, George R
Description: Student may contact the instructor or department for information.

Math 8583 Theory of Partial Differential Equations
A-F only, 3 credit(s);
Instructor: Keel, Markus
Description: Student may contact the instructor or department for information.

Math 8583 Theory of Partial Differential Equations
A-F only, 3 credit(s);
Instructor: Keel, Markus
Description: Student may contact the instructor or department for information.

Math 8601 Real Analysis
A-F only, 3 credit(s);
Instructor: Fristedt, Bert
Description: Student may contact the instructor or department for information.
Math 8601 Real Analysis
A-F only, 3 credit(s);
Instructor: Fristedt,Bert
Description: Student may contact the instructor or department for information.

Math 8651 Theory of Probability Including Measure Theory
3 credit(s);
Instructor: Baxter,John Robert
Description: Student may contact the instructor or department for information.

Math 8659 Stochastic Processes
3 credit(s);
Instructor: Bramson, Maury Daniel
Description: Student may contact the instructor or department for information.

Math 8680 Topics in Combinatorics
A-F only, 1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Reiner, Victor Schorr
Description: Student may contact the instructor or department for information.

Math 8701 Complex Analysis
A-F only, 3 credit(s);
Instructor: Brubaker, Benjamin
Description: Student may contact the instructor or department for information.

Math 8801 Functional Analysis
A-F only, 3 credit(s);
Instructor: Garrett, Paul
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study
S-N only, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Reitich, Fernando Leiva
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study
S-N only, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Ashkenazi, Rina
Description: Student may contact the instructor or department for information.

Math 8992 Directed Reading
S-N only, 1-6 credit(s), max credits 24, 6 completions allowed;
Instructor: Safonov, Mikhail V
Description: Student may contact the instructor or department for information.

Math 8993 Directed Study
S-N only, 1-6 credit(s), max credits 24, 6 completions allowed;
Instructor: Mori, Yoichiro
Math 8993 Directed Study
S-N only, 1-6 credit(s), max credits 24, 6 completions allowed;
Instructor: Bilyk,Dmytro
Description: Student may contact the instructor or department for information.

Mathematics Education  145 Peik Hall

MthE 3101 Mathematics and Pedagogy for Elementary Teachers I
A-F only, 3 credit(s);
Instructor: Cramer,Kathleen Ann
Description: Math content knowledge of K-6 in an environment modeling pedagogy for future implementation. Integrated content/methods. Problem solving, connections, communication, reasoning, representation. Functions, proportionality, number, numeration.

MthE 3102 Mathematics and Pedagogy for Elementary Teachers II
A-F only, 3 credit(s);
Instructor: Pettis,Christy R
Description: Math content knowledge of K-6 in an environment modeling pedagogy for future implementation. Integrated content/methods. Problem solving, connections, communication, reasoning, representation. Geometry, measurement, probability, statistics.

MthE 5021 Algebraic Structures in School Mathematics
3 credit(s);
Instructor: Wyberg,Terrence R
Description: Pedagogy, content, and instructional strategies for teaching arithmetic. Content and issues relevant to the algebra curriculum. Instructional materials and technology appropriate for arithmetic. Each offering of the course will focus on either elementary/middle or middle/secondary grade levels.

MthE 5314 Teaching and Learning Mathematics
3 credit(s);
Instructor: Clarkson,Lesa M

MthE 5355 Mathematics for Diverse Learners
3 credit(s);
Instructor: Clarkson,Lesa M
Description: Student may contact the instructor or department for information.

MthE 5993 Directed Studies in Mathematics Education
S-N only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: Secondary school classroom teaching project designed to improve specific teaching skills, planned by student and approved and directed by student's adviser as part of MthE program.

MthE 8571 Research in Mathematics Education
3 credit(s);
Instructor: Cramer,Kathleen Ann
Description: Student may contact the instructor or department for information.
MthE 8995 Problems: Mathematics Education
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Cramer,Kathleen Ann
Description: Student may contact the instructor or department for information.

Mechanical Engineering 125 Mechanical Engineering

ME 2011 Introduction to Engineering
A-F only, 4 credit(s);
Instructor: Durfee,William K
Description: Visit the course web site for a complete description.

ME 2011 Introduction to Engineering
A-F only, 4 credit(s);
Instructor: Kowalewski,Timothy Mariusz
Description: Visit the course web site for a complete description.

ME 3041 Industrial Assignment I
A-F only, 2 credit(s);
Instructor: Kelso, Frank M
Description: Student may contact the instructor or department for information.

ME 3221 Design and Manufacturing I: Engineering Materials and Manufacturing Processes
A-F only, 4 credit(s);
Instructor: Klamecki, Barney Eugene
Description: The goal of this course is to provide information and techniques so that material failure, engineering design and manufacturing engineering questions can be understood, asked, and answered using fundamental engineering science concepts.
Grading: 40% mid exam, 30% final exam, 15% written homework, 15% laboratory evaluation.

ME 3221 Design and Manufacturing I: Engineering Materials and Manufacturing Processes
A-F only, 4 credit(s);
Instructor: Klamecki, Barney Eugene
Description: Student may contact the instructor or department for information.

ME 3221 Design and Manufacturing I: Engineering Materials and Manufacturing Processes
A-F only, 4 credit(s);
Instructor: Yang, Rusen
Description: Student may contact the instructor or department for information.

ME 3222 Design and Manufacturing II
A-F only, 4 credit(s);
Instructor: Cui, Tianhong
Description: Student may contact the instructor or department for information.

ME 3222 Design and Manufacturing II
A-F only, 4 credit(s);
Instructor: Cui, Tianhong
Description: Student may contact the instructor or department for information.

ME 3281 System Dynamics and Control
A-F only, 4 credit(s);
Instructor: Kelso, Frank M
Description: Student may contact the instructor or department for information.

ME 3324 Introduction to Thermal Science
A-F only, 3 credit(s);
Instructor: Anthony, Rebecca J
Description: Student may contact the instructor or department for information.

ME 3331 Thermal Sciences I
A-F only, 3 credit(s);
Instructor: Northrop, William
Description: Student may contact the instructor or department for information.

ME 3332 Thermal Sciences II
A-F only, 3 credit(s);
Instructor: Simon, Terrence W
Description: Student may contact the instructor or department for information.

ME 3333 Thermal Sciences III
A-F only, 3 credit(s);
Instructor: Lipinski, Wojciech
Description: Student may contact the instructor or department for information.

ME 3333 Thermal Sciences III
A-F only, 3 credit(s);
Instructor: Lipinski, Wojciech
Description: Student may contact the instructor or department for information.

ME 4031W Basic Mechanical Measurements Laboratory
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: McMurry, Peter H
Description: Student may contact the instructor or department for information.

ME 4043W Industrial Assignment II
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Kelso, Frank M
Description: Student may contact the instructor or department for information.

ME 4044 Industrial Assignment III
A-F only, 2 credit(s);
Instructor: Kelso, Frank M
Description: Student may contact the instructor or department for information.

ME 4054W Design Projects
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Van Der Ven, James Donald
Description: Student may contact the instructor or department for information.

ME 4080 Topics in Mechanical Engineering: Engineering Modeling
4 credit(s), max credits 8;
Instructor: Kelso, Frank M
Description: This course is aimed at teaching mechanical engineering modeling, technical analysis and technical design capabilities from a non-compartmentalized perspective. The course focuses on: (i) modeling complex, multi-disciplinary mechanical engineering problems by identifying critical elements of a problem, (ii) design and development of analysis tools using analytical and numerical techniques and, (iii) developing optimized solutions/designs to problems/challenges. Most engineering problems are open-ended and extend over multiple engineering sub-disciplines and sciences (e.g. heat transfer, materials and controls), may provide too much or too little information on the problem, and may have conflicting design constraints. Moreover, many engineering problems may be modeled and analyzed at different levels of complexity (ranging from first order approximations, such as the back-of-the-envelope calculations, to detailed numerical analysis) depending on the desired/optimum outcome or project constraints. Therefore, it is imperative that engineers have the ability to model and analyze engineering problems, predict the outcomes and efficiently develop/design an optimum solution utilizing a wide variety of tools.
Grading: 30% mid exam, 50% reports/papers, 10% quizzes, 10% written homework.
ME 4081H Mechanical Engineering Honors Thesis I
A-F only, 2 credit(s);
Instructor: Chase, Thomas Richard
Description: Student may contact the instructor or department for information.

ME 4082H Mechanical Engineering Honors Thesis II
A-F only, 2 credit(s); Meets CLE req of Writing Intensive
Instructor: Van De Ven, James Donald
Description: Student may contact the instructor or department for information.

ME 4090 Advanced Engineering Problems
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Heberlein, Joachim Viktor R
Description: Student may contact the instructor or department for information.

ME 4131W Thermal Environmental Engineering Laboratory
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Kuehn, Thomas Howard
Description: Student may contact the instructor or department for information.

ME 4231 Motion Control Laboratory
A-F only, 4 credit(s);
Instructor: Rajamani, Rajesh
Description: Student may contact the instructor or department for information.

ME 4232 Fluid Power Control Lab
A-F only, 4 credit(s);
Instructor: Li, Perry Y
Description: This course's objectives are: 1) Introduce fluid power component, circuits, and systems 2) Provide hands on experience in design, analysis and implementation of control systems for real and physical systems; 3) Provide first hand experience in modeling, control and other dynamic systems concepts, such as in ME3281. Students will design, build and study hydraulic circuits in the first half of the semester, and design, analyze and implement controllers of different sophistications for electrohydraulic systems in the second half. There will be extensive use of Matlab/Simulink in analysis, implementation and design. This course emphasizes laboratory experience and making connections between physical systems and mathematical models.
ME 4331 Thermal Energy Engineering Laboratory
A-F only, 4 credit(s);
Instructor: Goldstein, Richard J
Description: Student may contact the instructor or department for information.

Exam Format: There will be one oral final exam

ME 5070 Topics in Mechanical Engineering: Modeling, Design & Specification of Mftg Processes
4 credit(s), max credits 8;
Instructor: Klamecki, Barney Eugene
Description: Student may contact the instructor or department for information.

ME 5103 Thermal Environmental Engineering
A-F only, 4 credit(s);
Instructor: Kuehn, Thomas Howard
Description: The main objective of this course is to gain a better understanding of man-made environments, primarily buildings, and to use this knowledge to quantify energy use, human thermal comfort, and occupant health. Topics include psychrometrics, forced air heating and cooling systems, heat transfer through composite structures, ventilation, air cleaning, solar energy, and energy estimation methods. Applications include residences, commercial office buildings and specialized environments such as clean rooms, hospital operating rooms, museums, and spacecraft. Designing and operating building systems to protect occupants from infectious airborne agents is also addressed. Visits to local mechanical rooms provide a realistic view of the subject material covered in class. Guest lecturers provide a real world perspective based on their personal experience.

Style: 75% Lecture, 15% Discussion, 5% Field Trips, 5% Guest Speakers.
Grading: 40% mid exam, 40% final exam, 20% problem solving.
Exam Format: problem solving

ME 5113 Aerosol/Particle Engineering
A-F only, 4 credit(s);
Instructor: Pui, David Y
Description: Student may contact the instructor or department for information.

ME 5211 Human Factors and Work Analysis
A-F only, 4 credit(s); Upper division CSE or grad student
Credit will not be granted if credit has been received for: IE 5511;
Instructor: Harder, Kathleen A.
Description: Student may contact the instructor or department for information.

ME 5228 Introduction to Finite Element Modeling, Analysis, and Design
A-F only, 4 credit(s);
Instructor: Tamma, Kumar K
Description: Student may contact the instructor or department for information.

ME 5281 Analog and Digital Control
4 credit(s);
Instructor: Stelson, Kim A
Description: Student may contact the instructor or department for information.

ME 5312 Solar Thermal Technologies
A-F only, 4 credit(e);
Instructor: Davidson, Jane H
Description: Student may contact the instructor or department for information.

ME 5462 Gas Turbines
A-F only, 4 credit(s);
Instructor: Kittelson, David Burnell
Description: Student may contact the instructor or department for information.

ME 8001 Research Ethics and Professional Practice
No Grade, 0 credit(s);
Instructor: Heberlein, Joachim Viktor R
Description: Student may contact the instructor or department for information.

ME 8221 New Product Design and Business Development I
A-F only, 4 credit(s); CSE grad student, some design experience
Credit will not be granted if credit has been received for: ENTR 6087;
Instructor: Durfee, William K
Description: See the course web site for a complete description.

ME 8221 New Product Design and Business Development II
A-F only, 4 credit(s); CSE grad student, some design experience
Credit will not be granted if credit has been received for: ENTR 6087;
Instructor: Sapienza, Harry Jack
Description: See the course web site for a complete description.

ME 8287 Topics in Dynamics and Control: Design and Control of Automotive Powertrain
A-F only, 4 credit(s), max credits 12, 3 completions allowed;
Instructor: Sun, Zongxuan
Description: Student may contact the instructor or department for information.

ME 8341 Conduction
A-F only, 3 credit(s);
Instructor: Kulacki, Francis A
Description: Student may contact the instructor or department for information.

ME 8343 Radiation
A-F only, 3 credit(s);
Instructor: Sparrow, Ephraim M
Description: Student may contact the instructor or department for information.

ME 8345 Computational Heat Transfer and Fluid Flow
3 credit(s);
Instructor: Garrick, Sean Clifford
Description: Student may contact the instructor or department for information.

ME 8361 Molecular Gas Dynamics
A-F only, 3 credit(s); CSE grad student
Credit will not be granted if credit has been received for: AEM 8231;
Instructor: Girshick, Steven L
Description: Student may contact the instructor or department for information.

ME 8773 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Cui, Tianhong
Description: Student may contact the instructor or department for information.

ME 8774 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Cui, Tianhong
Description: Student may contact the instructor or department for information.

ME 8794 Mechanical Engineering Research
S-N only, 1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Durfee, William K
Description: Student may contact the instructor or department for information.

Medical Industry Leadership Institute 4-145 Carlson School of Management
MILI 5995 Medical Industry Valuation Laboratory
A-F only, 2 credit(s);
Instructor: Nelson, Randall Stephen
Description: Student may contact the instructor or department for information.

MILI 5999 Independent Study
A-F only, 1-8 credit(s), max credits 16;
Instructor: Parente, Stephen T
Description: Student may contact the instructor or department for information.

MILI 6562 Information Technology in Health Care
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

MILI 6726 Medical Device Industry: Business and Public Policy
A-F only, 3 credit(s);
Instructor: Connor, Robert Alan
Description: Medical Device Industry: Business and Public Policy: This course covers the unique business, public policy, regulatory, and technology management issues of the medical device industry -- including growing interaction and overlap with the pharmaceutical, biotechnology, and information technology industries. The course features lecture and discussion with full time faculty, along with participation by industry leaders in guest faculty panels. Students successfully completing this course will understand: the historical development, importance, and future direction of the medical device industry; FDA issues, policies and strategies, public and private sector insurance coverage and reimbursement; interaction between public policies and private sector actions; intellectual property (IP) and liability issues concerning medical technology; and key issues relating to the start-up and management of new medical technology firms.

MILI 6990 The Health Care Marketplace
A-F only, 2 credit(s);
Instructor: Finch, Michael David
Description: Student may contact the instructor or department for information.

MILI 6992 Healthcare Delivery Innovations: Optimizing Cost and Quality
A-F only, 2 credit(s);
Instructor: Koranne MD, Rahul
Description: Student may contact the instructor or department for information.

MILI 6995 Medical Industry Valuation Laboratory
A-F only, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: STAFF
Description: Interdisciplinary student teams create rapid production market analysis of promising medical technologies/services to determine potential for success in market. Exposure to University innovations, venture firms, inventors.

MILI 6996 Medical Industry Valuation Laboratory II
A-F only, 2-4 credit(s), max credits 10, 3 completions allowed;
Instructor: Nelson, Randall Stephen
Description: Student may contact the instructor or department for information.

MILI 6999 Independent Study
A-F only, 1-8 credit(s), max credits 16;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Medicinal Chemistry

MedC 8001 General Principles of Medicinal Chemistry
A-F only, 3 credit(s);
MedC 8050 RECITATION IN MECHANISTIC ORGANIC CHEMISTRY
S-N only, 1 credit(s);
Instructor: Harki, Daniel A
Description: Student may contact the instructor or department for information.

MedC 8100 Medicinal Chemistry Seminar
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Abul-Hajj, Yusuf J
Description: Student may contact the instructor or department for information.

MedC 8413 Chemistry of Nucleic Acids
A-F only, 3 credit(s);
Instructor: Tretyakova, Natalia Yurievna
Description: Student may contact the instructor or department for information.

MedC 8753 MOLECULAR TARGETS OF DRUG DISCOVERY
A-F only, 3 credit(s);
Instructor: Finzel, Barry C.
Description: Student may contact the instructor or department for information.

MedC 8800 Medicinal Chemistry Laboratory Techniques
S-N only, 1-2 credit(s), max credits 4, 4 completions allowed;
Instructor: Ferguson, David M
Description: Student may contact the instructor or department for information.

MedC 8900 Research in Medicinal Chemistry
A-F only, 1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: Fecik, Robert A
Description: Student may contact the instructor or department for information.

Medieval Studies 131 Nolte Center

MeSt 1200 Topics: Greek and Roman Mythology
4 credit(s), max credits 4, 1 completion allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

MeSt 1905 Freshman Seminar: Medieval Mediterranean Piracy
A-F only, 3 credit(s);
Instructor: Reyerson, Kathryn L
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: Literature of Medieval City-States
4 credit(s), max credits 24, 8 completions allowed;
Instructor: Noakes, Susan J
Description: Study, in Italian, of Dante's masterpiece, THE DIVINE COMEDY. [Students wishing to take the course in English should see the note below about Italian 5609, "WORLD OF DANTE."] The 2012 offering of the course will focus on the COMEDY's first volume, the INFERNNO. It provides a rich depiction of and commentary upon life in the city-states, from the viewpoint of Florence, in many ways the most successful--and most flawed--among them, in Dante's opinion. Prerequisite: Italian 3015 or equivalent. This is a four-credit course because students must be committed to considerable work on Dante's poetic language, which challenges even some native speakers. Class discussion (in Italian), examinations, class presentations. N.B. Also offered in Fall 2012 is Italian 5609, "World of Dante," which requires no knowledge of Italian. This will be a hybrid course, with students doing online work on Wednesdays and Fridays, and meeting with the instructor on Mondays, during the same hour as the meetings for Italian 3209 on Wednesdays and Fridays (place TBD). Monday meetings will deal not only with the INFERNNO, in English, but also with modern literary, visual, and cinematic works "incited" by it, such as Amiri Baraka's THE SYSTEM OF DANTE'S HELL, about being a black American in the 20th
century. Weekly online quizzes, class discussion, final examination, short papers.

MeSt 3610 Topics in Medieval Studies: German Civ & Culture: Middle Ages to 1700
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Wakefield, Ray M
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: German Medieval Literature in Translation
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Wakefield, Ray M
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: Medieval and Renaissance European Medicine
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Shackelford, Jole Richard
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: History of the Crusades
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Reyerson, Kathryn L
Description: Taken as a whole, the Crusades make up one of the most fascinating episodes in the history of the Middle Ages. Our primary aim in this class will be to study the crusading phenomenon in its medieval context by engaging with the original documentary remains of the period. What motivated medieval European men and women to set out on the conquest of a land thousands of miles away, about which they knew very little? How did the papacy, as head of the Catholic Church, come to promote violence against the Muslim residents of that land as not merely justifiable, but as positively meritorious, as deserving of a great spiritual reward? How did the Muslim and also Jewish communities who were the primary targets of this violence respond to it, and how did the contact among Christians, Muslims, and Jews which the Crusades made possible transform relations among these groups, the three major monotheistic religions of the West? While focusing on the Crusades as an aspect of medieval history, we will also consider some of the larger questions raised by the history of these expeditions. What is the relationship between violence and religion? Does it differ in the Christian, Muslim, and Jewish traditions? What is the legacy of the crusades? Did they pave the way for the subsequent Western colonial ventures that eventually led to Western domination of much of the non-Western world? Did they set the stage for modern conflicts in the Middle East?
Style: 70% Lecture, 30% Discussion.
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.
Exam Format: essay exams

MeSt 3610 Topics in Medieval Studies: The Nature of the Cosmos
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Shank, JB
Description: This course is an interdisciplinary course developed through a National Endowment for the Humanities "Enduring Questions" grant (for details about the grant, visit: http://www.neh.gov/grants/guidelines/EnduringQuestions.html) The guiding question of this course is "What is the nature of the cosmos?" We will pursue the question by comparing cosmological understandings in different civilizations and historical periods. The course will begin by exploring what it means to ask this question, and what is involved in precisely trying to answer it. We will then look at some different answers offered across time and space. We will start with two ancient, non-Western responses: the Sanskrit Hindu tradition and the Native American tradition of the Lakota people. We will then examine the history of Western cosmological thinking by looking at Greco-Roman Antiquity, Medieval Christian and Islamic understandings, and the birth of modern, scientific cosmology in the Scientific Revolution (Galileo, Newton, etc.). The class will end with some reflections on the place and meaning of these cosmological traditions in the world today. Students who took the course in 2011 said that "the diversity and quality of course readings and class discussions allowed for creative exploration of complex ideas." This course "not only makes you think about past civilizations, it forces you to think out of the box. It not only makes you a better a student, it makes you a better human being." "This course teaches you how to empathize with people from radically different belief structures," and "it also made me think more about my own worldview and how I came to have it." "A perfect combination of science, philosophy, mythology, and religion. All you ever need to know to understand the universe!" "Everyone should take this course. Too often, students treat school as a job, and this course changes that. A wonderful course, it really changed the way i view the world." "An unbelievable experience. I signed up to learn about cosmological history, but I also learned so much about myself and the world I live in. Everyone should take this class."

MeSt 3610 Topics in Medieval Studies: Renaissance Art in Europe
3 credit(s), max credits 24, 8 completions allowed;
MeSt 3610 Topics in Medieval Studies: Deciphering Courtly Literatures of Medieval France
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Franklin-Brown, Mary
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: Jews of the Islamic Med & Christian Europe
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Schroeter, Daniel J
Description: The Jewish Diaspora that emerged in late antiquity and the early Middle Ages was remarkably diverse, while at the same time Jews shared common religious and cultural traditions. This course explores how Jews were shaped by the societies and cultures of the Islamic Mediterranean World and Christian Europe from 700 to 1700, while maintaining a distinctive identity. Under the dominant religions of Islam and Christianity, Jews developed autonomous religious and cultural institutions and communities, which frequently changed as Jews were influenced by and adapted to their cultural surroundings and changing historical circumstances. The relationship between diverse Jewish communities throughout the Muslim Mediterranean and Christian Europe is explored. The connections between communities were created and maintained through trade, travel, and the exchange of rabbinical culture and Jewish religious authority across political boundaries. While Jewish status differed under Muslim and Christian rule, this course explores how the experience of Jews was influenced by changing local circumstances, migrations, expulsions, violence, persecution, and resettlement in new locations with the expansion of trade routes and political change in both the Islamic and Christian worlds.
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 35% final exam, 30% reports/papers, 15% class participation.

MeSt 5610 Advanced Topics in Medieval Studies: Expansion of Europe, 1000-1750: Archival Research
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Ragnow, Marguerite
Description: Student may contact the instructor or department for information.

MeSt 5610 Advanced Topics in Medieval Studies: Old Norse Language & Literature
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Grimstad, Kaaren E
Description: Student may contact the instructor or department for information.

MeSt 5610 Advanced Topics in Medieval Studies: History of the German Language
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Liberman, Anatoly
Description: Old Saxon is a medieval Germanic language, known mainly from the /Heliand/ (The Savior), one of the greatest poetic monuments of old European literature. This life of Jesus, addressed, as it seems, to a recently converted audience and told by a poet of exceptional talent, is a rare window into the language, culture, and mentality of the past. The entire text cannot be covered in one semester, but we will read the most representative passages. As a rule, this course attracts a few graduate students who have had some previous exposure to Old Germanic, and five or six undergraduates to whom everything will be new. Our initial speed will be geared toward the second group (that is, in September and part of October we will be moving very slowly), but in five weeks or so the beginners will feel nearly as comfortable as the better prepared graduate students. The course presupposes neither tests nor papers. Its success and the grades will depend exclusively on attendance and performance in class. In addition to weekly assignments, short book reports are envisaged. Every student will be asked to read an article or a chapter in a book in English or German and tell its contents to the rest of the group.

MeSt 8110 Seminar in Medieval Studies: Marco Polo in theoretical & historical context
A-F only, 3 credit(s), max credits 48, 16 completions allowed;
Instructor: Noakes, Susan J
Description: French 8120 Topics in Later French Medieval Literature Fall 2012 The Marvels of the World: the Global Middle Ages, I. N.B. Taught in English this year. Note: This course is the first semester of the year-long Winton Seminar. The second semester, to be taught in Spring 2013, will treat different but related material. Students may enroll for both semesters or only one. Participation in the second semester is not contingent on participation in the first. During the Fall, the course will be co-taught by Winton Professor Geraldine Heng (Dept. of English, Univ. of Texas-Austin) along with Professor Noakes. "Marvels of the World" translates into English the French title of Marco Polo's famous account of his travels in the East (originally written in French). The seminar's focus will be the Asias (Central, South, East, etc.) during the period ca. 500-ca. 1500 C.E. Readings will be supplemented by discussions with eight visitors from off campus, specialists in the various parts of Asia during the period in question.
MeSt 8110 Seminar in Medieval Studies: Marco Polo in theoretical & historical context
A-F only, 3 credit(s), max credits 48, 16 completions allowed;
Instructor: Heng,Geraldine Guan Noi
Description: French 8120 Topics in Later French Medieval Literature Fall 2012 The Marvels of the World: the Global Middle Ages, I. N.B. Taught in English this year. Note: This course is the first semester of the year-long Winton Seminar. The second semester, to be taught in Spring 2013, will treat different but related material. Students may enroll for both semesters or only one. Participation in the second semester is not contingent on participation in the first. During the Fall, the course will be co-taught by Winton Professor Geraldine Heng (Dept. of English, Univ. of Texas-Austin) along with Professor Noakes. "Marvels of the World" translates into English the French title of Marco Polo's famous account of his travels in the East (originally written in French). The seminar's focus will be the Asias (Central, South, East, etc.) during the period ca. 500-ca. 1500 C.E. Readings will be supplemented by discussions with eight visitors from off campus, specialists in the various parts of Asia during the period in question.
Style: 20% Lecture, 60% Discussion, 15% Student Presentation, 5% Guest Speakers.
Grading: 60% reports/papers, 10% in-class presentation, 30% class participation.

Microbial Engineering 240 Gortner Lab

MicE 8920 Teaching Practicum
1 credit(s), max credits 4, 4 completions allowed;
Instructor: Brooker,Robert James
Description: Student may contact the instructor or department for information.

MicE 8990 Biotechnology Seminar
1 credit(s), max credits 2;
Instructor: Ellis, Lynda B
Description: Student may contact the instructor or department for information.

Microbiology 1460 Mayo (Box 196)

MicB 3301 Biology of Microorganisms
A-F only, 5 credit(s);[BIOL 1002 or BIOL 1009 or BIOL 2002], CHEM 2301, Concurrent registration is required (or allowed) in CHEM 2302Credit will not be granted if credit has been received for: VBS 2032;
Instructor: Mohr, Christian D
Description: Microbiology 3303 will provide an extensive overview of the microbial world highlighting the structure, function, and diversity of microorganisms including bacteria, fungi, protozoa and viruses. Topics will include microbial taxonomy, anatomy, physiology, biochemistry, molecular biology and ecology. Microbial pathogenesis, immunology and infectious disease will also be presented and discussed.

MicB 3303 Biology of Microorganisms
A-F only, 3 credit(s);BIOL 2002, BIOL 2003, BIOL 2004, CHEM 1021, CHEM 1022, CHEM 2301, Concurrent registration is required (or allowed) in CHEM 2302Credit will not be granted if credit has been received for: MICB 3301;
Instructor: Mohr, Christian D
Description: Microbiology 3303 will provide an extensive overview of the microbial world highlighting the structure, function, and diversity of microorganisms including bacteria, fungi, protozoa and viruses. Topics will include microbial taxonomy, anatomy, physiology, biochemistry, molecular biology and ecology. Microbial pathogenesis, immunology and infectious disease will also be presented and discussed.

MicB 4111 Microbial Physiology and Diversity
3 credit(s);
Instructor: Bond, Daniel R
Description: Structural/functional organization of bacteria/archaea. Energy metabolism utilizing light, inorganic/organic chemicals. Cell morphologies, roles/assembly of surface structures. Growth/survival mechanisms in various extreme environments. Adaptation to changing conditions by development of specialized cells/structures, altering metabolic patterns. Bacterial genetics and molecular techniques to understand sophisticated metabolic cascades in a diversity of bacteria - from the bottom of the ocean, to the human gut, to Antarctica. The course blends the study of well understood processes along with new metabolic pathways not yet found in text books.
MicB 4131 Immunology
3 credit(s); [2022 or VPB 2022 or BIOL 2032 or VPB 2032 or VBS 2032 or 3301 or BIOL 3301], [BIOC 3021 or BIOL 3021 or BIOC 4331]; Credit will not be granted if credit has been received for: VPM 4131;
Instructor: Jemmerson, Ronald R
Style: 100% Lecture.

MicB 4161W Eukaryotic Microbiology
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Davis, Dana
Description: Eukaryotic Microbiology covers topics in eukaryotic microbiology that provide insights into the cell biology of higher eukaryotes, animal and plant pathogenesis, and evolution. Model eukaryotic organisms have included: Saccharomyces cerevisiae, Chlamydomonas reinhardtii, Plasmodium falciparum, Toxoplasma gondii, Candida albicans, and Diatoms! The students are the driving force behind this course and are actively encouraged to participate in discussions, give presentations, and critique the scientific interpretations and conclusions of others.
Style: 25% Lecture, 30% Discussion, 5% Small Group Activities, 25% Student Presentation, 10% Guest Speakers, 5% Web Based.
Grading: 25% mid exam, 25% final exam, 15% reports/papers, 10% written homework, 25% class participation.
Exam Format: Essay

MicB 4215 Advanced Laboratory: Microbial Physiology and Diversity
A-F only, 3 credit(s);
Instructor: Armstrong, Sandra K
Description: Advanced laboratory course consisting of the isolation, cultivation and study of a wide variety of prokaryotes from environmental sources. Experiments to examine certain aspects of bacterial physiology are performed on selected isolates. Other isolates are identified by 16S rDNA sequencing analysis. Independence, analytical thinking and written communication skills are emphasized, as is technical proficiency in microbiology and general laboratory methods.
Style: 100% Laboratory.

MicB 4225W Advanced Laboratory: Microbial Genetics
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Nielsen, Kirsten
Description: This course is designed as an introduction to the power of microbial genetics using the baker's yeast Saccharomyces cerevisiae as a model organism. Although yeasts have greater genetic complexity than bacteria, they still share many of the technical advantages that permit rapid progress in understanding principles of molecular genetics and most methods do not differ significantly from methods employed with other microorganisms. In this course, students will learn basic genetic principles such as isolation of mutants, meiotic mapping, mitotic recombination, and gene replacement through hands-on experimentation. This is a writing intensive course. Access will be granted from a wait list, with priority given to CBS Microbiology majors and then other CBS majors. If you are interested in registering for MicB 4225W, please put yourself on the wait list.
Style: 10% Lecture, 10% Discussion, 80% Laboratory.
Grading: 20% mid exam, 60% reports/papers, 5% quizzes, 10% in-class presentation, 5% class participation.

MicB 4793W Directed Studies: Writing Intensive
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Johnson, Tim
Description: Student may contact the instructor or department for information.

MicB 4794W Directed Research: Writing Intensive
S-N only, 1-7 credit(s), max credits 15, 15 completions allowed; Meets CLE req of Writing Intensive
Instructor: Largaespada, David Andrew
Description: Student may contact the instructor or department for information.

MicB 4993 Directed Studies
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Bey, Russell F
Description: Student may contact the instructor or department for information.
**MicB 4994 Directed Research**
- S-N only, 1-7 credit(s), max credits 7, 1 completion allowed;
- Instructor: Streifel, Andrew Joseph
- Description: Student may contact the instructor or department for information.

**Microbiology, Immunology, and Cancer Biology 1460 Mayo (Box 196 UMHC)**

**MICa 5000 Practicum: Teaching**
- No Grade, 0 credit(s);
- Instructor: Jemmerson, Ronald R
- Description: Student may contact the instructor or department for information.

**MICa 8002 Structure, Function, and Genetics of Bacteria and Viruses**
- A-F only, 4 credit(s);
- Instructor: Dunny, Gary M
- Description: Student may contact the instructor or department for information.

**MICa 8010 Microbial Pathogenesis**
- A-F only, 3 credit(s);
- Instructor: Southern, Peter
- Description: Student may contact the instructor or department for information.

**MICa 8011 Current Topics in Immunology**
- A-F only, 3 credit(s);
- Instructor: Jenkins, Marc
- Description: Student may contact the instructor or department for information.

**MICa 8012 Writing and Reviewing a Research Proposal**
- A-F only, 2 credit(s);
- Instructor: Pennell PhD, Christopher A
- Description: This course has two goals. The first is to provide students with an appreciation for how microbiology, immunology and cancer biology interact. This goal is achieved through journal club style presentations of primary research articles that span two of the three disciplines. The second goal is to prepare MICaB graduate students for their qualifying examinations. As such, MICA 8012 is only open to MICaB graduate students.

**MICa 8012 Writing and Reviewing a Research Proposal**
- A-F only, 2 credit(s);
- Instructor: Kelekar, Ameeta
- Description: This course has two goals. The first is to provide students with an appreciation for how microbiology, immunology and cancer biology interact. This goal is achieved through journal club style presentations of primary research articles that span two of the three disciplines. The second goal is to prepare MICaB graduate students for their qualifying examinations. As such, MICA 8012 is only open to MICaB graduate students.

**MICa 8094 Research in Microbiology, Immunology, and Cancer Biology**
- S-N only, 1 credit(s), max credits 5, 5 completions allowed;
- Instructor: Jenkins, Marc
- Description: Student may contact the instructor or department for information.

**MICa 8910 Seminar: Faculty Research Topics**
- No Grade, 0 credit(s);
- Instructor: Pennell PhD, Christopher A
- Description: Student may contact the instructor or department for information.

**MICa 8920 Seminar: Student Research Topics**
- No Grade, 0 credit(s);
- Instructor: Pennell PhD, Christopher A
- Description: Student may contact the instructor or department for information.
### Military Science

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<tr>
<td>Mil 1201</td>
<td>Innovative Team Leadership</td>
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<td>Leard, David Allen</td>
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<td>Mil 3301</td>
<td>Adaptive Tactical Leadership</td>
<td>A-F</td>
<td>Phillips, Ryan Davis</td>
<td>Challenges cadets to study, practice, and evaluate adaptive leadership skills as they are presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, cadets continue to develop their leadership and critical thinking abilities. Style: 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Web Based.</td>
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<tr>
<td>Mil 3401</td>
<td>Developing Adaptive Leaders</td>
<td>A-F</td>
<td>DuFault, Frederick Joseph</td>
<td>Student may contact the instructor or department for information.</td>
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<tr>
<td>Mil 3402</td>
<td>Leadership in a Complex World</td>
<td>A-F</td>
<td>Ruedebusch, Mitchell Adam</td>
<td>Student may contact the instructor or department for information.</td>
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<tr>
<td>Mil 3403</td>
<td>MS IV One Credit Lead Lab</td>
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<td>DuFault, Frederick Joseph</td>
<td>Student may contact the instructor or department for information.</td>
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<tr>
<td>Mil 3501</td>
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<td>A-F</td>
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<td>Student may contact the instructor or department for information.</td>
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</table>
A-F only, 2 credit(s);
Instructor: Lykens, David A
Description: Student may contact the instructor or department for information.

Mil 3970 Military History
A-F only, 3 credit(s);
Instructor: Ruedebusch, Mitchell Adam
Description: Student may contact the instructor or department for information.

Molecular Cellular Developmental Biol and Genetics
MCDG 8900 Student Research Seminar
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Conklin, Kathleen F
Description: Student may contact the instructor or department for information.

MCDG 8920 Special Topics
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: Towle, Howard
Description: Student may contact the instructor or department for information.

MCDG 8950 Teaching Practicum
S-N only, 1 credit(s), max credits 2;
Instructor: Brooker, Robert James
Description: Student may contact the instructor or department for information.

MCDG 8994 Research
S-N only, 1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Voytas, Daniel F
Description: Student may contact the instructor or department for information.

Mortuary Science
Mort 3005 History of Funeral Service
A-F only, 2 credit(s);
Instructor: Mathews, Michael Clark
Description: Student may contact the instructor or department for information.

Mort 3012W Organization and Management of Funeral Business
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Mort 3014 Funeral Service Rules and Regulations
A-F only, 2 credit(s);
Instructor: Mathews, Michael Clark
Description: Student may contact the instructor or department for information.

Mort 3016 Funeral Service Marketing and Merchandising
A-F only, 3 credit(s);
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Mort 3018 Funeral Practice
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Mathews, Michael Clark
Description: A study of the practice of funeral service arrangements and the conduct of funerals, including different types of funeral...
ceremonies, cemetery types and eligibility, obituary writing and use of computers in funeral service.

Style: 80% Lecture, 15% Discussion.
Grading: 60% mid exam, 20% final exam, 10% special projects, 5% in-class presentation, 5% class participation.
Exam Format: Multiple choice

Mort 3021W Funeral Service Psychology
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ellis, Thomas Matthew
Description: Student may contact the instructor or department for information.

Mort 3022W Funeral Service Arrangements
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Mort 3022W Funeral Service Arrangements
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Mort 3025 Business Law
A-F only, 3 credit(s);
Instructor: Meslow, Doug
Description: Student may contact the instructor or department for information.

Mort 3049 Microbiology
A-F only, 2 credit(s);
Instructor: Mathews, Michael Clark
Description: Student may contact the instructor or department for information.

Mort 3050 Pathology
A-F only, 3 credit(s);
Instructor: Mathews, Michael Clark
Description: Student may contact the instructor or department for information.

Mort 3051 Restorative Art
A-F only, 2 credit(s);
Instructor: LaCourt, Jody Lynn
Description: Student may contact the instructor or department for information.

Mort 3061 Embalming Theory
A-F only, 3 credit(s);
Instructor: LaCourt, Jody Lynn
Description: Student may contact the instructor or department for information.

Mort 3065 Embalming Chemistry
A-F only, 2 credit(s);
Instructor: Mathews, Michael Clark
Description: Student may contact the instructor or department for information.

Mort 3090 Independent Study Project
1-15 credit(s), max credits 30;
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Mort 3091W Independent Study in Funeral Service
1-4 credit(s), max credits 4, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: LuBrant, Michael P
Description: Student may contact the instructor or department for information.

Mort 3151 Restorative Art Laboratory
A-F only, 1 credit(s), max credits 2;
Instructor: LaCourt, Jody Lynn
Description: Student may contact the instructor or department for information.

Mort 3161 Embalming Laboratory
A-F only, 1 credit(s), max credits 2;
Instructor: LaCourt, Jody Lynn
Description: Student may contact the instructor or department for information.

Mort 3171 Human Anatomy Laboratory
A-F only, 2 credit(s);
Instructor: Lee, David A
Description: Student may contact the instructor or department for information.

Mort 3370 Death and Dying Across Cultures and Religions
A-F only, 3 credit(s);
Instructor: Roach Thomas, Gloria
Description: Student may contact the instructor or department for information.

Mort 3379 Clinical Funeral Service Rotation
S-N only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Mort 3380 Funeral Service Practicum
S-N only, 8 credit(s);
Instructor: LuBrant, Michael P
Description: Student may contact the instructor or department for information.

Moving Image Studies 235 Nicholson Hall

MlmS 5002 Advanced Film Analysis
A-F only, 0-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Mowitt, John W
Description: Variation on a joke: two friends exit a movie theater. Their conversation is animated, even intense. They disagree about the meaning and significance of the film they have just screened. More than a dispute about taste, theirs is a dispute about signs: what did the character actually say? Did the shot frame her from above or below? Was there music throughout the scene, or only when the enemies were not speaking? What music? Does the logic of the narrative statement map the political territory of the "post-911 world"? You get the picture. How do these friends meaningfully and precisely disagree? About what exactly? The intensity of their dispute is only partly about the affect of disputation. It is also about the film. Some "thing" they paid to screen. This course is intended to be an extended application of the technique of "textual analysis" applied, ideally but not necessarily, to a single film. Students will work collaboratively to "read" (discern and interpret) all the component elements (sounds and images) of what the film says and how it says it. The collaborative work will be organized around three "teams" broken down into study groups: the semioticians, the political economists and the philosophers. The objective of the course is to teach students how to develop the analytical skills by which to attach with meticulous precision their interpretation of a film to its actual details.
Style: 40% Lecture, 50% Film/Video, 10% Student Presentation.
Grading: 100% reports/papers.

MlmS 8003 Historiography of the Moving Image
A-F only, 3 credit(s);
Instructor: Lovejoy, Alice Osborne
Description: Student may contact the instructor or department for information.

Multidisciplinary Studies 20 Ruttan Hall
MdS 3001W Introduction to Multidisciplinary Studies
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Borowicz, Josh
Description: This course is designed for returning adult students admitted to the Multidisciplinary Studies (MdS) degree. MdS 3001W reintroduces you to baccalaureate study at a university, one that is both a major research and a land-grant institution--the University of Minnesota. Readings, quizzes and exams, writing assignments, and online class work will prompt both reflective and synthetic thinking appropriate to individualized education.
Grading: -10 quizzes and 2 proctored (not online) exams (25%) -15 online discussions and various other activities (20%) -8 Academic Journal assignments (11.2%) -Educational Autobiography (40%) -Extra Credit (3.8%)

MdS 3001W Introduction to Multidisciplinary Studies
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Garrett, Lisa Ann
Description: This online course is for returning adult students who are admitted to the College of Continuing Education's Multidisciplinary Studies major. Students will develop the skills for creating a proposal of study while cultivating an understanding of the fundamental aspects of a baccalaureate degree at the University of Minnesota. The role of an undergraduate degree in a lifetime of learning will be explored through critical reflection. Students will produce a MdS Proposal for Plan of Study and formulate a plan of courses and projects through which to complete a degree. Course Learning Objectives: Students will: Investigate the nature of higher education and what it means to be university-educated; Recognize U of M degree goals and assess previous life, professional, and academic experience against the University's Student Learning Outcomes and Student Development Outcomes; Understand the nature of an individualized degree and define the components of the MdS degree; Explore the five areas of study in the MdS degree and how each can relate to our understanding of self, our interactions with the people and world around us, and our life experiences; Understand the process of critical reflection and its relationship to adult learning and development; Collaborate with peers to respond thoughtfully and critically to the work of others; and Prepare a MdS Proposal for Plan of Study.
Style: Online Writing Intensive
Grading: 41% MdS Proposal for Plan of Study, 29% Reflective Journal Essays, 15.5% Online Discussions, 14.5% Lifework Inventories/Activities and Peer Reviews

Museum Studies  300 Bell Museum

MSt 5011 Museum History and Philosophy
A-F only, 3 credit(s);
Instructor: Nelson-Mayson, Lin
Description: Student may contact the instructor or department for information.

MSt 8993 Directed Study in Museum Studies
A-F only, 1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: King, Lyndel Irene
Description: Student may contact the instructor or department for information.

Music  100 Ferguson Hall

Mus 1001 Fundamentals of Music
3 credit(s);
Instructor: STAFF
Description: An introduction to the musical notation and structure of Western music. This course is intended for non-music majors and will cover the following topics: rhythm, pitch, meter, keyboard, major/minor scales, intervals, chords, and harmony. Course work is participatory and includes singing, playing instruments, clapping and aural perception. Grades are determined from assignments, quizzes, a paper and mid-term and final exams. Class time includes two lectures and one lab per week. The syllabus is on the class web. (Note: this class includes four lab sections: 002, 003, 004, and 005.)
Style: 66% Lecture, 33% Laboratory.
Grading: 10% mid exam, 15% final exam, 10% reports/papers, 20% quizzes, 20% laboratory evaluation, 25% problem solving.
Exam Format: Multiple choice and written answer; written and aural examination
Mus 1001 Fundamentals of Music
3 credit(s);
Instructor: Damschroder, David A
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit “Class URL” for ODL policies, including fee and financial aid restrictions. Perhaps you assumed that you could complete a music fundamentals course just by reading and memorizing facts. Not in this course! If it helps, keep in mind that the only person who will hear your singing will be the instructor. And remember, you will not be evaluated for the quality of your voice, but only on whether you can sing the right notes at the right times. After you have completed this course, you should be able to: --read and write pitch notation in treble or bass clef; --read and write music in a variety of meters; --name and construct intervals, scales, and chords; --analyze a chord progression; --distinguish the sound of one interval, triad, or scale from another; --perform melodies written in a variety of keys and meters, by both singing and playing the piano; and --perform rhythmic notation accurately.
Style: This is a printed, correspondence section.
Grading: Written assignments 120 pts. Performance assignments 120 Course projects 60 Midcourse examination 100 Final examination 100 TOTAL 500
Exam Format: Supervised, in-person (not online) exams.

Mus 1013 Rock I: The Historical Origins and Development of Rock Music to 1970
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Lubet, Alex J
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a group. Visit “Class URL” for ODL policies, including fee and financial aid restrictions. Rock music has been an enormously influential and reflexive social force. It is thus common in higher education to study rock primarily as sociology, history, English literature, and fashion—seemingly as anything but the music that is its essence. This course is an exception. Rock music is examined here principally as music—by a practicing musician. This by no means implies that rock's powerful social implications will be ignored, only that the potency of its social energy emanates from its uniquely compelling sound. For the purposes of this course, rock music will be construed to include all youth-based and youth-inspired American and American-influenced popular music of the era roughly spanning 1950 to 1970. We include both African-American and European-American styles, as well as styles bearing the influences of other ethnic groups.
Style: Online
Grading: Song Analysis--12% In My Life Essays--36% Come Together Essays--48% Discussion Questions--4%

Mus 1013 Rock I: The Historical Origins and Development of Rock Music to 1970
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Currie, Scott
Description: Student may contact the instructor or department for information.

Mus 1015 Music and Movies: The Use and Representation of Music and Musicians in Film in a Global Context
A-F only, 4 credit(s);
Instructor: Lubet, Alex J
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a group. Visit “Class URL” for ODL policies, including fee and financial aid restrictions. Most courses and texts on music and film tend to dwell almost exclusively upon a single genre and a single relationship (e.g., How the underscoring can enhance the action, mood, or character portrayal in a particular genre—be it drama, romance, or comedy). It has always been the norm to place limitations on the relationship between music and film. Specialized disciplines have produced numerous masterpieces, and we will not ignore them in this course. However, the relationship between music and film is far more complex than this and begs to be explored more fully. In particular, the depiction of music and musicians on-screen has been enormously common. It has been exceptionally useful in conveying plot, characterization, archetypes, and even in symbolizing entire cultures and "types."
Style: Online
Grading: 25% final exam, 50% reports/papers, 25% special projects. See syllabus for complete grading information.
Exam Format: Take-home exam

Mus 1021 Introduction to Music
3 credit(s); Credit will not be granted if credit has been received for: MUS 3021; Meets CLE req of Arts/Humanities
Instructor: Grayson, David Alan
Description: For non-majors (no prior knowledge of music required or assumed): Musical Masterpieces of the Millennium, from Gregorian Chant to Jazz. The course begins with fundamentals—the elements of music (rhythm, melody, harmony, texture, etc.) and their notation—but the emphasis will be on the psychology of perception: What do we perceive when we listen to music? The goal is to develop listening skills in order to enhance understanding and enjoyment. An exploration of music from develops musical memory.
After cultivating these listening skills, we will survey representative masterpieces of the past thousand years, starting with chant and ending with works of the late twentieth century, including a smattering of musical comedy and jazz. Along the way we will examine masterpieces by Bach, Mozart, Beethoven, Chopin, Brahms, Stravinsky, and many other famous composers. Some opera videos will be shown. Listening to music in this class is sure to make it the highlight of your day!

**Style:** 85% Lecture, 15% Discussion.

**Grading:** 17% mid exam, 17% final exam, 33% reports/papers, 33% quizzes.

**Exam Format:** fill in the blanks

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**Mus 1051 Class Piano for Nonmusic Majors I**

**OPT No Aud, 2 credit(s);**

**Instructor:** STAFF

**Description:** A beginning course for non-music majors with little or no keyboard background. Emphasis on basis functional skills, such as reading, harmonizing, playing by ear and improvising, along with basic technique, elementary repertoire, and music theory (written). Taught by graduate assistants in an electronic multi-piano lab. Includes lecture, group and individual performance, and some individual instruction. Outside practice is required. Practice rooms may be rented through the School of Music. Text: Contemporary Class Piano, 7th ed. by Elyse Mach. Mus 1051 covers Units 1-5, including intervals up to a fifth, major scales and key signatures, major and minor 5-finger patterns and triads, and accompaniments using I, IV and V7 chords.

**Style:** 10% Lecture, 90% Laboratory.

**Grading:** 20% mid exam, 20% final exam, 40% quizzes, 10% class participation, 5% other evaluation. two written projects

**Exam Format:** Individual keyboard performance (plus some written theory).

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**Mus 1052 Class Piano for Non Music Majors II**

**OPT No Aud, 2 credit(s);**

**Instructor:** STAFF

**Description:** Continuation of Mus 1051. Emphasis on basic functional skills, such as reading, harmonizing, playing by ear and improvising, along with basic technique, elementary repertoire, and music theory (written). Taught by graduate assistants in an electronic multi-piano lab. Includes lecture, group and individual performance, and some individual instruction. Outside practice is required. Practice rooms may be rented through the School of Music. Text: Contemporary Class Piano, 7th ed. by Elyse Mach. Mus 1052 begins with a review of Mus 1051 and covers Units 6-10, including major and minor scales; intervals up to an octave; accompaniment styles; ABA form; syncopation; secondary chords; pedaling; other scale forms; harmonizing with i, iv, and V7 in minor; jazz styles; 2-hand accompaniments; and major and minor 7th chords.

**Style:** 10% Lecture, 90% Laboratory.

**Grading:** 20% mid exam, 25% final exam, 5% special projects, 40% quizzes, 10% class participation.

**Exam Format:** Individual keyboard performance (plus some written theory).

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**Mus 1151 Piano: Class Lessons I**

**A-F only, 2 credit(s);**

**Instructor:** STAFF

**Description:** A beginning course for freshman music majors or minors with limited keyboard background. Co-requisite for freshman music theory. Taught by graduate assistants in an electronic piano lab. Emphasis is on functional skills, such as reading, transposing, harmonizing, improvising, and playing by ear, along with keyboard theory, technique, and repertoire. Includes lecture, group and individual performance, and some individual instruction. Text: "Group Piano for Adults Book I" by Lancaster and Renfrow, 2nd ed. and "Easy Classics to Moderns" by Agay. Mus 1151 covers Units 1-13. Students with previous piano background should contact the School of Music for information regarding placement or credit by exam.

**Style:** 10% Lecture, 90% Laboratory.

**Grading:** 25% mid exam, 25% final exam, 40% quizzes, 10% class participation.

**Exam Format:** individual keyboard performance

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**Mus 1155 Keyboard Skills I**

**A-F only, 2 credit(s);**

**Instructor:** Shockley, Rebecca P

**Description:** Mus 1155 Keyboard Skills I. A functional piano skills course for freshman keyboard majors and other music majors with extensive keyboard background, to be taken with freshman music theory. Emphasis is on reading, transposing, harmonizing, improvising and playing by ear, along with keyboard theory, technique, and repertoire. Taught in an electronic piano lab. (Advanced non-keyboard majors may substitute one semester of Mus 1155 for Mus 1151-1152 with instructor permission.) Text: Harmonization at the Piano (6th ed.) by Frackenpohl plus supplementary materials available on the course website. 1155 covers chapters 1-6 plus 3-part vocal scores.

**Style:** 10% Lecture, 90% Laboratory.

**Grading:** 20% mid exam, 20% final exam, 40% quizzes, 15% in-class presentation, 5% class participation.
Exam Format: individual keyboard performance

Mus 1260 Voice Class
2 credit(s), max credits 4;
Instructor: Grau, John Thomas
Description: Student may contact the instructor or department for information.

Mus 1260 Voice Class
2 credit(s), max credits 4;
Instructor: Colby, Zachary Alan
Description: Student may contact the instructor or department for information.

Mus 1260 Voice Class
2 credit(s), max credits 4;
Instructor: Hynes, Laura
Description: Student may contact the instructor or department for information.

Mus 1471 Guitar: Class Lessons I
A-F only, 2 credit(s);
Instructor: STAFF
Description: Fundamentals for the beginning guitarist; progressive development of skills. Beginning finger-style technique. Introductory sight-reading skills. Emphasis on performance, practice methods, posture, and sound production. Students must furnish an acoustic guitar, preferably a nylon-string guitar.
Style: 40% Lecture, in-class performance
Grading: 25% mid exam, 25% final exam, 50% class participation.
Exam Format: performance

Mus 1472 Guitar: Class Lessons II
A-F only, 2 credit(s);
Instructor: Lake, Brendan Scott
Description: Student may contact the instructor or department for information.

Mus 1501 Theory and Analysis of Tonal Music I
A-F only, 2 credit(s);
Instructor: STAFF
Description: The first semester of a four-semester sequence of courses devoted to tonal music theory. The focus of these courses is on analysis of music of the eighteenth and nineteenth centuries, part-writing (learning how to write music in historical styles), and skills including sight-singing, ear-training, and keyboard performance. Music 1501 is intended primarily for music majors and music minors. Non-majors generally enroll in Mus 1001 unless they intend to continue in the theory sequence beyond a single term.
Style: 40% Lecture, 40% Discussion, 20% Laboratory

Mus 1801W Music, Society, and Cultures
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Mus 1804 World Music
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives
Instructor: STAFF
Description: If you love music, this is the course for you. The only prerequisite is curiosity. Whether you have musical training or not, music is an integral part of your life. You are not only surrounded by it, but you use it to define who you are and what you value in life. This is a great opportunity for non-music majors to get introduced to music from a world music perspective. Explore this exciting world and gain a cross-cultural understanding of basic musical elements (rhythm, harmony, melody, texture, and timbre). You will be taken on a musical tour around the globe, focusing on a small number of representative cultures. Our goal is to understand how each representative musical case study fits into a larger cultural, social, and political context. What does it mean to be a musician? How does music relate to a culture's daily life and understanding of the universe? These are some of the questions we will be addressing. This course will broaden your horizons and sharpen your critical thinking. You will also have some
hands-on musical experiences (you will not be evaluated on the basis of your musical ability). Using musical case studies from around the world, we will explore differences in aesthetics that stem from different lifestyles and values. The course objectives will be accomplished through lectures, video viewing, lots of listening, some hands-on musical experience, selected readings, and assigned concert attendance.

A-F only, 3 credit(s);
Instructor: Mazzola PhD,Guerino
Description: This seminar is about the way music comes into our existence; from its symbolic abstraction to the vibrations of our psyche and the physical waves, and how it is communicated among humans from composers to audiences; how it creates poetic, emotional, and physiological meaning; is embodied in musicians' lives; and unfolds abstract formulas into living gestures. The seminar should clarify to freshmen why they want to study music, and why music is about the whole life. This study is not an easy game, but is as serious as your life.

Mus 1905 Topics: Freshman Seminar: Shakespeare in Film & Music
A-F only, 3 credit(s);
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

Mus 1908W Topics: Freshman Seminar: Music in Nazi Germany
A-F only, 3 credit(s), max credits 6; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Painter PhD, Karen
Description: Does art sustain those in power or can it be independent and even adversarial? Are artists, musicians, and critics responsible for the effect of what they produce and publish, regardless of their intentions? The relationship of art and politics is contested in every era and under all sorts of regimes. Can those in power use the arts or the media to legitimate their rule for better or worse? Can the arts maintain their independence? What role do the listener or amateur musician play in pursuing a political agenda or resisting? The seminar will examine the role of art and art censorship in civic life by focusing on the role of music in one of history's most brutal regimes, which was also among the greatest patrons of music. What did mean for a musician, conductor, or composer to collaborate, and what were the degrees of collaboration and associated guilt and punishment? Did music matter to the built up of support for Nazism or the conformism required by the totalitarian state (even if some aspects of the regime defied this unity)? And finally it asks how should citizens of democratic societies commemorate and judge the choices that artists made in harsher times.
Style: 20% Lecture, 20% Film/Video, 40% Discussion, 20% Student Presentation.
Grading: 65% reports/papers, 20% reflection paper, 15% class participation. Weekly reaction emails are 1-2 paragraphs. The two lowest grades will not count, and you may miss 2 weeks.

Mus 3021 Introduction to Music
3 credit(s); Credit will not be granted if credit has been received for: MUS 1021; Meets CLE req of Arts/Humanities
Instructor: Grayson, David Alan
Description: For non-majors (no prior knowledge of music required or assumed): Musical Masterpieces of the Millennium, from Gregorian Chant to Jazz. The course begins with fundamentals--the elements of music (rhythm, melody, harmony, texture, etc.) and their notation--but the emphasis will be on the psychology of perception: What do we perceive when we listen to music? The goal is to develop listening skills in order to enhance understanding and enjoyment. An exploration of musical from develops musical memory. After cultivating these listening skills, we will survey representative masterpieces of the past thousand years, starting with chant and ending with works of the late twentieth century, including a smattering of musical comedy and jazz. Along the way we will examine masterpieces by Bach, Mozart, Beethoven, Chopin, Brahms, Stravinsky, and many other famous composers. Some opera videos will be shown. Listening to music in this class is sure to make it the highlight of your day!
Style: 85% Lecture, 15% Discussion.
Grading: 17% mid exam, 17% final exam, 33% reports/papers, 33% quizzes.
Exam Format: fill in the blanks

Mus 3045 The Avant-Garde
A-F only, 3 credit(s);
Instructor: Lubet, Alex J
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid information. No one can truly "appreciate" music without the experiences of performance and composition. Taking as a point of departure the Avant-Garde's notions that all sounds are potentially musical and that all people are potentially musicians--ideas that are also among my most cherished musical beliefs--you will be asked to create a musical "performance event" that includes at least one of your own original compositions. While you may at first doubt your ability to accomplish this formidable artistic endeavor, let me assure you that,
Based on my years of experience teaching this course, you can do this and you will enjoy it! You may like it so much that, long after you have completed this course, you may, like several of my students, come to think of yourself as a composer and musician and continue to create and perform works of sonic art. Nothing would please me more.

**Style:** Online  
**Grading:** Course Completion Calendar (1%) Seven journal assignments (49%) Final project (50%)  

Mus 3200 Campus Singers  
- **2 credit(s), max credits 16, 8 completions allowed;**  
- **Instructor:** Adrian, Russell P  
- **Description:** Student may contact the instructor or department for information.

Mus 3200 Campus Singers  
- **2 credit(s), max credits 16, 8 completions allowed;**  
- **Instructor:** Olson, Matthew J  
- **Description:** Student may contact the instructor or department for information.

Mus 3200 Campus Singers  
- **2 credit(s), max credits 16, 8 completions allowed;**  
- **Instructor:** Mehaffey, Matthew Wayne  
- **Description:** Campus Singers is a non-auditioned choral ensemble open to all members of the University community, including students from all majors, faculty, staff and alumni. Offered as a 2-credit class (MUS 3200, sections 1, 2, 3 or 4), Campus Singers ensembles present two concerts each semester of diverse choral repertoire including classical, folk, popular, and global music. Check the class schedule for meeting times of the different sections.

Mus 3200 Campus Singers  
- **2 credit(s), max credits 16, 8 completions allowed;**  
- **Instructor:** Morgan, Andrew D  
- **Description:** Student may contact the instructor or department for information.

Mus 3230 Chorus  
- **1-2 credit(s), max credits 16, 8 completions allowed;**  
- **Instructor:** Romey, Kathy Saltzman  
- **Description:** The University Women's Chorus presents choral music programs of classical, folk, popular and global repertoire for female and mixed voices. Concerts occur both on and off campus and include performances at Ted Mann Concert Hall, civic venues, and at area festivals. Women's Chorus regularly collaborates with the Men's Chorus, University Singers, Twin Cities arts organizations, other collegiate women's choruses, and various University ensembles. The chorus is open to undergraduate and graduate majors and non-majors. Auditions are held at the beginning of each semester in Ferguson Hall. Information can be obtained by emailing ensemble@umn.edu or by calling the School of Music Ensemble office at (612) 624-5056.  
  - **Style:** rehearsal/lecture; 20% performance  
  - **Grading:** 25% other evaluation. attendance of rehearsals/performances; 25% repertoire preparation; 25% demonstrated understanding/application of course materials and techniques; 25% participation, presentation and performance  
  - **Exam Format:** reaction paper and final performances replace final exam

Mus 3241 Vocal Literature (German Lieder) and Pedagogy  
- **A-F only, 1 credit(s);**  
- **Instructor:** Zaro-Mullins, Wendy  
- **Description:** Student may contact the instructor or department for information.

Mus 3262 English Diction for Singers  
- **A-F only, 1 credit(s);**  
- **Instructor:** Zawisza, Philip David  
- **Description:** Student may contact the instructor or department for information.

Mus 3263 German Diction for Singers  
- **A-F only, 1 credit(s);**  
- **Instructor:** Zawisza, Philip David  
- **Description:** Student may contact the instructor or department for information.
**Mus 3340 Jazz Ensemble**
- A-F only, 1 credit(s), max credits 8, 8 completions allowed;
- Instructor: Sorenson, Dean Patrick
- **Description:** The University Jazz Ensembles play a wide variety of big band repertoire and perform for many events, both on and off campus. Entrance is limited to instruments that are traditionally a part of the big band: trumpet, trombone, saxophone, piano, guitar, bass, drums, and percussion. Placement is by audition, and registration is not permitted until after an audition has taken place.
- **Style:** Rehearsal/performance

**Mus 3350 Jazz Combo**
- A-F only, 1 credit(s), max credits 8, 8 completions allowed;
- Instructor: STAFF
- **Description:** Jazz combos study a wide range of small group jazz literature. Time is also spent on improvisation and performance practice concepts. Performances are scheduled each semester. Ensembles are open to music majors and non-music majors, and auditions are required. Students are placed according to their ability and experience.
- **Style:** performance/rehearsal

**Mus 3400 University and Campus Bands**
- 2 credit(s), max credits 20, 10 completions allowed;
- Instructor: Messier, Brian
- **Description:** Student may contact the instructor or department for information.

**Mus 3400 University and Campus Bands**
- 2 credit(s), max credits 20, 10 completions allowed;
- Instructor: Pettus, Andrew Howard
- **Description:** Student may contact the instructor or department for information.

**Mus 3400 University and Campus Bands**
- 2 credit(s), max credits 20, 10 completions allowed;
- Instructor: Martin, Ingrid Jacqueline
- **Description:** Student may contact the instructor or department for information.

**Mus 3410 University Wind Bands**
- A-F only, 1 credit(s), max credits 14, 14 completions allowed;
- Instructor: Luckhardt, Jerry M
- **Description:** A music ensemble of select wind and percussion players. The ensemble includes a number of undergraduate and graduate majors from other disciplines. Symphonic band performs 4 to 5 concerts each academic year. Admission is by audition only.
- **Style:** rehearsal
- **Grading:** rehearsal preparation and performance

**Mus 3410 University Wind Bands**
- A-F only, 1 credit(s), max credits 14, 14 completions allowed;
- Instructor: Kirchhoff, Craig J
- **Description:** A select ensemble comprising the University's finest graduate and undergraduate wind and percussion musicians. Performs 5 to 6 concerts on and off campus each academic year. Admission by audition only.
- **Style:** rehearsal
- **Grading:** rehearsal preparation and performance

**Mus 3420 Orchestra**
- A-F only, 1 credit(s), max credits 8, 8 completions allowed;
- Instructor: Smith, Mark Russell
- **Description:** Student may contact the instructor or department for information.

**Mus 3430 Campus Orchestra**
- 2 credit(s), max credits 16, 8 completions allowed;
- Instructor: Klemme, Benjamin
- **Description:** Student may contact the instructor or department for information.

**Mus 3440 Chamber Ensemble**
A-F only, 1 credit(s), max credits 8, 8 completions allowed;  
Instructor: STAFF  
Description: Chamber ensembles provide an opportunity for music majors to study and perform chamber music (generally works for three or more instruments) with a faculty coach. There is at least one public performance by each group during the semester. Qualified non-music majors may be permitted to register for chamber music with instructor permission following an audition. For information regarding participation in the School of Music chamber music program, please see: http://www.music.umn.edu/enscomp/chamber.php  
Style: 100% Laboratory.  
Grading: performances

Mus 3480 Marching Band  
A-F only, 2 credit(s), max credits 8, 4 completions allowed;  
Instructor: Diem,Timothy W  
Description: One of the most exciting and highly visible organizations on campus, the 300+ member Minnesota Marching Band provides enthusiastic support to the University's athletics programs, represents the University with pride at home and away, and plays a vital role in the social lives of its members. The band is designed for undergraduate and graduate students representing a wide variety of academic disciplines across campus. Marching Band season officially begins in late August with the training period known as Spat Camp and concludes with the Indoor Concerts in early December. Registration for Spat Camp with the Marching Band Office is required by June 30. Formal auditions may be required depending on number of interested students.  
Style: rehearsal  
Grading: rehearsal preparation and performance

Mus 3490 Athletics Bands  
A-F only, 1 credit(s), max credits 16, 16 completions allowed;  
Instructor: Diem,Timothy W  
Description: Three Athletic Pep bands, which play for men's hockey and basketball and women's volleyball, basketball and hockey, begin in September. Each band will perform 25 - 30 times throughout the year including regular season and post season events. Audition is required and are held in early September for formation of the three groups. Year-long participation is required.

Mus 3501 Theory and Analysis of Tonal Music III  
A-F only, 2 credit(s);  
Instructor: Bribitzer-Stull,Matt  
Description: Student may contact the instructor or department for information.

Mus 3508 Review of Tonal Theory  
3 credit(s);  
Instructor: Saathoff,Zachary C  
Description: Student may contact the instructor or department for information.

Mus 3511 Ear-Training and Sight-Singing III  
A-F only, 1 credit(s);  
Instructor: Bribitzer-Stull,Matt  
Description: Student may contact the instructor or department for information.

Mus 3518 Review of Ear-Training and Sight-Singing  
1 credit(s);  
Instructor: STAFF  
Description: A course intended for transfer and graduate music majors who, based on the Placement Exam for Entering Students, require remediation in ear-training and sight-singing. Mus 3518 covers at a fast pace the ear-training content of Mus 1502 (Theory II) and Mus 3501 (Theory III). After Mus 3518, the sequence continues with Mus 3502 (for students who need both theory and ear-training review for the contents of Theory IV) or Mus 3511 (for students who need only ear-training review for the contents of Theory IV).  
Style: 40% Discussion, 50% Laboratory. sight-singing auditions  
Grading: 20% mid exam, 20% final exam, 10% quizzes, 50% other evaluation. sight-singing auditions  
Exam Format: dictation

Mus 3602W History of Western Music II  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Harness,Kelley A  
Description: Student may contact the instructor or department for information.
Mus 4504 Intensive Theory and Analysis of 20th-Century Music
A-F only, 2 credit(s);
Instructor: Cherlin, Michael
Description: Student may contact the instructor or department for information.

Mus 4505 Jazz Theory
A-F only, 3 credit(s);
Instructor: Sorenson, Dean Patrick
Description: Jazz Theory explores the music theory concepts that exist within jazz performance, composition, and improvisation. The course is intended for upper division undergraduates or graduate students who have a good background in traditional music theory.
Style: 100% Lecture.
Grading: 15% mid exam, 30% final exam, 13% quizzes, 12% problem solving, 30% other evaluation.
Exam Format: Two other exams, in addition to the final and the midterm

Mus 4514 Ear-Training and Sight-Singing for 20th-Century Music
A-F only, 1 credit(s);
Instructor: Cherlin, Michael
Description: Student may contact the instructor or department for information.

Mus 5101 Piano Pedagogy I
2 credit(s);
Instructor: Shockley, Rebecca P
Description: First semester of a year-long course, offered jointly through day school and Continuing Education and Extension. Demonstration and discussion of teaching techniques, methods, and materials for group and individual instruction. Emphasis on the beginning and intermediate levels. Includes observation, reading, discussion, class presentation and hands-on experience. Text: "Teaching Piano in Groups" by Christopher Fisher, plus supplementary material available on the website. Intended for piano majors or pianists with piano teaching experience. Prereq: two years of college-level applied piano instruction or #.
Style: 25% Lecture, 25% Discussion, 25% Laboratory, 25% Student Presentation.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 20% in-class presentation, 20% other evaluation.
Exam Format: essay

Mus 5150 Body Awareness in Activity: The Alexander Technique for Musicians
2 credit(s), max credits 4;
Instructor: McCullough, Brian
Description: The Alexander Technique is a century-old technique used by musicians and others as a means of solving performance problems and achieving greater potential. For musicians, the interplay of the unconscious habits and body mechanics of daily "use of the self" strongly affect tone production and technical ease. The Alexander Technique provides tools to enhance fundamental coordination leading to improved performance and reduction in stage fright and musculoskeletal pain. The texts used are: "Indirect Procedures--A Musician's Guide to the Alexander Technique" by Pedro de Alcantara; and "Mind and Muscle" by Elizabeth Langford (available on reserve in library). Class discussions will center on assigned readings and each student will be responsible for two short papers on selected portions of the texts. Also open to non-musicians.
Style: 10% Lecture, 25% Film/Video, 25% Discussion, 25% Laboratory, 15% Demonstration. individual work with students
Grading: 33% reports/papers, 33% attendance, 33% class participation.

Mus 5181 Advanced Piano Literature I
A-F only, 2 credit(s);
Instructor: Shaw, Paul Magnus
Description: Student may contact the instructor or department for information.

Mus 5230 Chorus
1-2 credit(s), max credits 16, 8 completions allowed;
Instructor: Romey, Kathy Saltzman
Description: The University Women's Chorus presents choral music programs of classical, folk, popular and global repertoire for female and mixed voices. Concerts occur both on and off campus and include performances at Ted Mann Concert Hall, civic venues, and at area festivals. Women's Chorus regularly collaborates with the Men's Chorus, University Singers, Twin Cities arts organizations, other collegiate women's choruses, and various University ensembles. The chorus is open to undergraduate and graduate majors and non-majors. Auditions are held at the beginning of each semester in Ferguson Hall. Information can be obtained by emailing ensemble@umn.edu or by calling the School of Music Ensemble office at (612) 624-5056.
Style: rehearsal/lecture; 20% performance
Grading: 25% other evaluation. attendance of rehearsals/performances; 25% repertoire preparation; 25% demonstrated understanding/application of course materials and techniques; 25% participation, presentation and performance.

Exam Format: reaction paper and final performances replace final exam.

Mus 5240 University Singers
A-F only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: Romey, Kathy Saltzman
Description: The University Singers is the flagship choral ensemble of the University of Minnesota. The group performs as both a large ensemble and smaller chamber ensembles. Singers explore classical and global repertoire for mixed chorus from the Renaissance through the 20th century. Concerts, both on and off campus, include convention presentations, touring, and collaborations with ensembles including the Minnesota Orchestra, St. Paul Chamber Orchestra, other college and community choruses, and many School of Music ensembles. Auditions are held at the beginning of each semester in Ferguson Hall. Information can be obtained by emailing ensemble@umn.edu or by calling the School of Music Ensemble office at (612) 624-5056.

Mus 5250 Opera Workshop and Ensemble
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Walsh, David Allan
Description: Section 1 of Opera Workshop is designed to provide performance-oriented opera and music theatre singers with theoretical and practical instruction in opera stagecraft. The course will combine theatre games and exercises, improvisations, script readings, plus rehearsal of selected opera and music theatre repertoire appropriate to the skill development of the individual student. The 'non-production' nature of this course means that the student has the possibility of exploring and 'trying things out'. Section 2 of Opera Workshop will include participation in the chorus of Opera Theatre productions, where appropriate. Participation in this class (either section) will be determined through an audition process, and/or interview with the instructor, and will be restricted to graduate students and juniors/seniors in the undergraduate programme (exceptions to this restriction may be made on an individual basis, in discussion with the instructor)."
Style: 20% Discussion. Practical instruction in stagecraft
Grading: 20% in-class presentation, 80% class participation.
Exam Format: There are no formal exams. The in-class participation and the presentation of improvs, script readings and scene studies will be the basis for grading the students accomplishments and progress.

Mus 5275 Vocal Pedagogy I
3 credit(s);
Instructor: Del Santo, Jean Marie
Description: Vocal Pedagogy is open to those students who are vocal performance majors, collaborative piano majors and music education majors. This course is offered every two years. Students must be a junior, senior, adult vocal educator or vocal graduate student to be eligible for enrollment. Course content includes reading, discussion, written reports, oral presentations and performances. Topics covered include vocal anatomy, physiology and acoustics, voice use and care, instructional techniques for the applied studio, and the diagnosis and correction of vocal faults.

Mus 5280 Opera Theatre
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Walsh, David Allan
Description: The Opera Theatre programme is designed to provide performance-oriented opera and music theatre singers with theoretical and practical instruction in opera stagecraft, as well as genuine operatic performance experience. Two fully-staged productions per school year, with all the relevant staging demands, offer the student performer an opportunity to showcase her/his talent in a public presentation. Opera Theatre classes will be determined on the basis of audition.
Style: 20% Discussion. Direct practical staging instruction
Grading: 100% other evaluation. Staging and musical work
Exam Format: Performances of the opera production each semester

Mus 5340 Jazz Ensemble
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Sorenson, Dean Patrick
Description: The University Jazz Ensembles play a wide variety of big band repertoire and perform for many events, both on and off campus. Entrance is limited to instruments that are traditionally a part of the big band: trumpet, trombone, saxophone, piano, guitar, bass, drums, and percussion. Placement is by audition, and registration is not permitted until after an audition has taken place.
Style: Rehearsal/performance

Mus 5410 University Wind Bands
Mus 5410 University Wind Bands
A-F only, 1 credit(s), max credits 14, 14 completions allowed;
Instructor: Luckhardt, Jerry M
Description: A music ensemble of select wind and percussion players. The ensemble includes a number of undergraduate and graduate majors from other disciplines. Symphonic band performs 4 to 5 concerts each academic year. Admission is by audition only.
Style: rehearsal
Grading: rehearsal preparation and performance

Mus 5420 Orchestra
A-F only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: Kirchhoff, Craig J
Description: A select ensemble comprising the University's finest graduate and undergraduate wind and percussion musicians. Performs 5 to 6 concerts on and off campus each academic year. Admission by audition only.
Style: rehearsal
Grading: rehearsal preparation and performance

Mus 5423 Suzuki Pedagogy Practicum
A-F only, 1 credit(s), max credits 2;
Instructor: Bjork, Mark P
Description: Student may contact the instructor or department for information.

Mus 5430 Contemporary Music Workshop
A-F only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: Dillon, James
Description: Student may contact the instructor or department for information.

Mus 5440 Chamber Ensemble
A-F only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: STAFF
Description: Chamber ensembles provide an opportunity for music majors to study and perform chamber music (generally works for three or more instruments) with a faculty coach. There is at least one public performance by each group during the semester. Qualified non-music majors may be permitted to register for chamber music with instructor permission following an audition. For information regarding participation in the School of Music chamber music program, please see: http://www.music.umn.edu/enscomp/chamber.php
Grading: performance

Mus 5460 World Music Ensemble: Afro-Brazilian Carnaval
1-2 credit(s), max credits 16, 8 completions allowed;
Instructor: Currie, Scott
Description: Student may contact the instructor or department for information.

Mus 5490 Percussion Ensemble
A-F only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Mensah, Sowah
Description: Student may contact the instructor or department for information.

Mus 5490 Percussion Ensemble
A-F only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Meza, Fernando A.
Description: Practice and performance of standard and contemporary compositions for percussion instruments in various combinations.
Style: 20% Lecture, 80% Laboratory.
Grading: 40% in-class presentation, 60% laboratory evaluation.
Exam Format: no exams
Mus 5490 Percussion Ensemble
   A-F only, 1 credit(s), max credits 10, 10 completions allowed;
   Instructor: Clark Silva, Marilyn Kathleen
   Description: Student may contact the instructor or department for information.

Mus 5491 Percussion Literature I
   A-F only, 2 credit(s);
   Instructor: Meza, Fernando A.
   Description: Student may contact the instructor or department for information.

Mus 5550 Class Composition
   A-F only, 2 credit(s), max credits 4, 4 completions allowed;
   Instructor: Dillon, James
   Description: Student may contact the instructor or department for information.

Mus 5561 Orchestration I
   A-F only, 3 credit(s);
   Instructor: Lubet, Alex J
   Description: Student may contact the instructor or department for information.

Mus 5571 Schenkerian Analysis for Performers
   A-F only, 3 credit(s);
   Instructor: Damschroder, David A
   Description: Student may contact the instructor or department for information.

Mus 5624 Music of J. S. Bach
   A-F only, 3 credit(s);
   Instructor: Harness, Kelley A
   Description: Student may contact the instructor or department for information.

Mus 5647 20th-Century European/American Music
   3 credit(s);
   Instructor: Painter PhD, Karen
   Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music: Improvisation and Creativity
   2-3 credit(s), max credits 15, 15 completions allowed;
   Instructor: Sorenson, Dean Patrick
   Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music: Conducting Performance and Pedagogy
   4 credit(s), max credits 15, 15 completions allowed;
   Instructor: Romey, Kathy Saltzman
   Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music: Performance Practice Issues: Music after 1700
   3 credit(s), max credits 15, 15 completions allowed;
   Instructor: Grayson, David Alan
   Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music
   2 credit(s), max credits 15, 15 completions allowed;
   Instructor: Bjork, Mark P
   Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music: Career Resources and Studio Administration
   2 credit(s), max credits 15, 15 completions allowed;
   Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

**Mus 5950 Topics in Music**
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Gopinath, Sumanth S
Description: Student may contact the instructor or department for information.

**Mus 5950 Topics in Music: Introduction to Music Information Technology**
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Mazzola PhD, Guerino
Description: Student may contact the instructor or department for information.

**Mus 5950 Topics in Music: Creativity in the Arts: Philosophical Perspectives**
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Huovinen, Erkki Simeon
Description: How do people recognize creativity? How, if at all, does creativity in the arts differ from scientific creativity or from creativity in everyday life? What is the relationship between our psychological sense of novelty and absolute historical novelty? Does creativity always incorporate improvisation? How can we understand something that is truly new and original? Is creativity madness? Is it dangerous? Is it possible to teach creativity? Why is creativity valued? How can it be studied? These kinds of questions have occupied generations of artists, philosophers, psychologists, scientists and educators, and there are no self-evident answers to any of them. Nevertheless, our thinking about artistic creativity can reveal a lot about how we understand art's relation to social life, emotion and cognition, human agency, science, religion, and human nature in general. This course aims at strengthening students' understanding of their own artistic creativity and the role of creativity in the art world by examining philosophical and psychological accounts of creativity, both classical and contemporary. By studying and discussing a readings in philosophy, psychology, as well as practitioners' own writings in various art forms, the students will learn about the many fascinating roles that creativity has played in western thought. By studying examples of empirical work in the study of artistic creativity, they will gain a better sense of the relationships between aspects of creativity that are open to discursive scrutiny and ones that remain subjective - perhaps even spiritual - in nature. At the same time, the students will learn to better discuss their own creativity and find theoretical reference points that will help them mature as self-conscious, creative artists.

Style: 25% Lecture, 5% Film/Video, 40% Discussion, 10% Small Group Activities, 15% Student Presentation, 5% Field Trips.
Grading: 20% final exam, 20% reports/papers, 5% special projects, 10% reflection paper, 15% in-class presentation, 30% class participation.

**Mus 8110 Sonata Seminar**
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Lovelace, Timothy
Description: Student may contact the instructor or department for information.

**Mus 8131 Advanced Keyboard Skills**
A-F only, 2 credit(s);
Instructor: Billmeyer, Dean W
Description: Student may contact the instructor or department for information.

**Mus 8255 Choral Literature: Baroque Era to the Present**
A-F only, 3 credit(s);
Instructor: Mehaffey, Matthew Wayne
Description: Student may contact the instructor or department for information.

**Mus 8450 Graduate Seminar in Conducting**
A-F only, 3-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Romey, Kathy Saltzman
Description: Student may contact the instructor or department for information.

**Mus 8450 Graduate Seminar in Conducting**
A-F only, 3-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Kirchhoff, Craig J
Description: Student may contact the instructor or department for information.
Mus 8450 Graduate Seminar in Conducting
A-F only, 3-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Smith, Mark Russell
Description: Student may contact the instructor or department for information.

Mus 8550 Composition
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Sorenson, Dean Patrick
Description: Student may contact the instructor or department for information.

Mus 8550 Composition
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Lubet, Alex J
Description: Student may contact the instructor or department for information.

Mus 8550 Composition
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Dillon, James
Description: Student may contact the instructor or department for information.

Mus 8560 Readings in Music Theory
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Gopinath, Sumanth S
Description: Student may contact the instructor or department for information.

Mus 8581 Schenkerian Theory and Analysis I
A-F only, 3 credit(s);
Instructor: Damschroder, David A
Description: Student may contact the instructor or department for information.

Mus 8590 Topics in 20th-Century Analysis
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Cherlin, Michael
Description: Student may contact the instructor or department for information.

Mus 8640 Seminar in Musicology: Rock-Era Popular Song
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Mercer-Taylor, Peter J
Description: Student may contact the instructor or department for information.

Mus 8864 Current Issues in Ethnomusicology
A-F only, 3 credit(s);
Instructor: Rahaim, Matthew
Description: This course offers an introduction to the theory and practice of ethnomusicology. In addition to surveying a range of classic musical ethnographies, seminar participants will also have the opportunity to produce their own original accounts of musical practices in the Twin Cities. Readings also will include excursions into anthropology, philosophy, acoustics, and other related fields.

MusA 1101 Piano: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: STAFF
Description: Individual piano instruction by graduate piano TAs for non-music majors with prior piano study. Weekly 30-minute or 60-minute lessons are arranged individually with the instructor, along with a short jury exam at the end of the semester. Requires permission by the Class Piano Coordinator or a piano TA. Information on applied music fees and how to obtain permission to register may be obtained from the School of Music Office, Room 100 Ferguson Hall, (612) 624-5740, or at http://music.umn.edu/students/Piano%20Ap%201101_3101.pdf
Style: individual lessons

Music Applied  100 Ferguson Hall
Grading: 40% final exam, 60% other evaluation. weekly lesson preparation
Exam Format: individual keyboard performance (jury)

MusA 1103 Organ: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Billmeyer, Dean W
Description: Student may contact the instructor or department for information.

MusA 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Grau, John Thomas
Description: Student may contact the instructor or department for information.

MusA 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

MusA 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Colby, Zachary Alan
Description: Student may contact the instructor or department for information.

MusA 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Hynes, Laura
Description: Student may contact the instructor or department for information.

MusA 1105 Violin: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Kim, Young-Nam
Description: Student may contact the instructor or department for information.

MusA 1105 Violin: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Bjork, Mark P
Description: Student may contact the instructor or department for information.

MusA 1105 Violin: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Corbett, Alexander M
Description: Student may contact the instructor or department for information.

MusA 1107 Cello: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Yaffe, Nathaniel
Description: Student may contact the instructor or department for information.
MusA 1109 Flute: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Cho, Hyun Jin
Description: Student may contact the instructor or department for information.

MusA 1111 Oboe: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Marshak, Jeffrey Paul
Description: Student may contact the instructor or department for information.

MusA 1113 Saxophone: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Hutchins, Kyle H
Description: Student may contact the instructor or department for information.

MusA 1114 Bassoon: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Fess, Linda Ruth
Description: Student may contact the instructor or department for information.

MusA 1115 French Horn: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Arndt, Logan J
Description: Student may contact the instructor or department for information.

MusA 1116 Trumpet: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Baldwin, David B
Description: Student may contact the instructor or department for information.

MusA 1116 Trumpet: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Brandt, Jonathan Richard
Description: Student may contact the instructor or department for information.

MusA 1117 Trombone: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Hilson, Keith Frank
Description: Student may contact the instructor or department for information.

MusA 1121 Percussion: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Clark Silva, Marilyn Kathleen
Description: Student may contact the instructor or department for information.

MusA 1123 Guitar: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Miric, Darka
Description: Student may contact the instructor or department for information.

MusA 1123 Guitar: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Miric, Tanja
Description: Student may contact the instructor or department for information.

MusA 1123 Guitar: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
MusA 1201 Piano: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Shaw, Paul Magnus  
Description: Student may contact the instructor or department for information.

MusA 1204 Voice: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Kierig, Barbara G  
Description: Student may contact the instructor or department for information.

MusA 1204 Voice: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Zaro-Mullins, Wendy  
Description: Student may contact the instructor or department for information.

MusA 1204 Voice: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: De Haan, John  
Description: Student may contact the instructor or department for information.

MusA 1204 Voice: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Zawisza, Philip David  
Description: Student may contact the instructor or department for information.

MusA 1206 Viola: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Konkol, Korey Bernard  
Description: Student may contact the instructor or department for information.

MusA 1209 Flute: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Davis, Immanuel  
Description: Student may contact the instructor or department for information.

MusA 1211 Oboe: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Snow, John D  
Description: Student may contact the instructor or department for information.

MusA 1213 Saxophone: Music Ed and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Rousseau, Eugene E  
Description: Student may contact the instructor or department for information.

MusA 1215 French Horn: Music Education and BA  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Lemen, Caroline May  
Description: Student may contact the instructor or department for information.
MusA 1216 Trumpet: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Baldwin, David B
Description: Student may contact the instructor or department for information.

MusA 1217 Trombone: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

MusA 1221 Percussion: Music Ed and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Meza, Fernando A.
Description: Student may contact the instructor or department for information.

MusA 1223 Guitar: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Radovanilja, Maja
Description: Student may contact the instructor or department for information.

MusA 1301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Shaw, Paul Magnus
Description: Student may contact the instructor or department for information.

MusA 1301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Braginsky, Alexander
Description: Student may contact the instructor or department for information.

MusA 1304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 1304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Kierig, Barbara G
Description: Student may contact the instructor or department for information.

MusA 1304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

MusA 1304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 1305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Kim, Young-Nam
Description: Student may contact the instructor or department for information.

MusA 1305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: O'Reilly, Sally P  
Description: Student may contact the instructor or department for information.

**MusA 1305 Violin: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Bjork, Mark P  
Description: Student may contact the instructor or department for information.

**MusA 1306 Viola: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Konkol, Korey Bernard  
Description: Student may contact the instructor or department for information.

**MusA 1307 Cello: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Remenikova, Tanya  
Description: Student may contact the instructor or department for information.

**MusA 1308 Double Bass: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Brown, Christopher Craig  
Description: Student may contact the instructor or department for information.

**MusA 1311 Oboe: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Snow, John D  
Description: Student may contact the instructor or department for information.

**MusA 1312 Clarinet: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Fiterstein, Alexander  
Description: Student may contact the instructor or department for information.

**MusA 1313 Saxophone: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Rousseau, Eugene E  
Description: Student may contact the instructor or department for information.

**MusA 1314 Bassoon: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Ullery, Charles G  
Description: Student may contact the instructor or department for information.

**MusA 1315 French Horn: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Gast, Michael C  
Description: Student may contact the instructor or department for information.

**MusA 1318 Euphonium: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Tranter, John Harrington  
Description: Student may contact the instructor or department for information.

**MusA 1319 Tuba: Music Major**  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Campbell, Steven C  
Description: Student may contact the instructor or department for information.
MusA 1321 Percussion: Music Major  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Hey, Philip C  
Description: Student may contact the instructor or department for information.

MusA 1321 Percussion: Music Major  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Meza, Fernando A.  
Description: Student may contact the instructor or department for information.

MusA 1323 Guitar: Music Major  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Radovanlijia, Maja  
Description: Student may contact the instructor or department for information.

MusA 1401 Piano: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: STAFF  
Description: Individual piano instruction by graduate piano TAs for music majors who have completed Class Piano Mus 1151-1152 or equivalent proficiency. Weekly 30-minute or 60-minute lessons are arranged individually with the instructor, along with a short jury exam at the end of the semester. Information on applied music fees and how to register may be obtained from the School of Music Office, Room 100 Ferguson Hall, or at http://music.umn.edu/students/Piano%20Ap%201401%205401.pdf  
Style: individual lessons  
Grading: 40% final exam, 60% other evaluation. weekly lesson preparation  
Exam Format: individual keyboard performance (jury)

MusA 1403 Organ: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Billmeyer, Dean W  
Description: Student may contact the instructor or department for information.

MusA 1404 Voice: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Grau, John Thomas  
Description: Student may contact the instructor or department for information.

MusA 1404 Voice: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Zaro-Mullins, Wendy  
Description: Student may contact the instructor or department for information.

MusA 1404 Voice: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: De Haan, John  
Description: Student may contact the instructor or department for information.

MusA 1404 Voice: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Hynes, Laura  
Description: Student may contact the instructor or department for information.

MusA 1409 Flute: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Cho, Hyun Jin  
Description: Student may contact the instructor or department for information.

MusA 1414 Bassoon: Music Major Secondary (undergraduate)  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Nielubowski, Norbert John
Description: Student may contact the instructor or department for information.

MusA 1418 Euphonium: Music Major Secondary (undergraduate)
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Tranter, John Harrington
Description: Student may contact the instructor or department for information.

MusA 1421 Percussion: Music Major Secondary (undergraduate)
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Hey, Philip C
Description: Student may contact the instructor or department for information.

MusA 1421 Percussion: Music Major Secondary (undergraduate)
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Clark Silva, Marilyn Kathleen
Description: Student may contact the instructor or department for information.

MusA 1423 Guitar: Music Major Secondary (undergraduate)
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Miric, Darka
Description: Student may contact the instructor or department for information.

MusA 1423 Guitar: Music Major Secondary (undergraduate)
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Lake, Brendan Scott
Description: Student may contact the instructor or department for information.

MusA 1903 Organ: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Billmeyer, Dean W
Description: Student may contact the instructor or department for information.

MusA 1904 Voice: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Kierig, Barbara G
Description: Student may contact the instructor or department for information.

MusA 1904 Voice: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: De Haan, John
Description: Student may contact the instructor or department for information.

MusA 1904 Voice: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 1907 Cello: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Remenikova, Tanya
Description: Student may contact the instructor or department for information.

MusA 1909 Flute: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Bogorad, Julia A
Description: Student may contact the instructor or department for information.
MusA 1917 Trombone: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

MusA 1923 Guitar: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Radovanlija, Maja
Description: Student may contact the instructor or department for information.

MusA 2301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Shaw, Paul Magnus
Description: Student may contact the instructor or department for information.

MusA 2301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Artymiw, Lydia
Description: Student may contact the instructor or department for information.

MusA 2304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 2304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Kierig, Barbara G
Description: Student may contact the instructor or department for information.

MusA 2304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

MusA 2304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: De Haan, John
Description: Student may contact the instructor or department for information.

MusA 2304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 2304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

MusA 2305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: O'Reilly, Sally P
Description: Student may contact the instructor or department for information.

MusA 2305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Bjork, Mark P
Description: Student may contact the instructor or department for information.

MusA 2307 Cello: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Remenikova, Tanya
Description: Student may contact the instructor or department for information.

MusA 2308 Double Bass: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Brown, Christopher Craig
Description: Student may contact the instructor or department for information.

MusA 2309 Flute: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Davis, Immanuel
Description: Student may contact the instructor or department for information.

MusA 2312 Clarinet: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Fiterstein, Alexander
Description: Student may contact the instructor or department for information.

MusA 2313 Saxophone: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Wyatt, Angela J.
Description: Student may contact the instructor or department for information.

MusA 2313 Saxophone: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Rousseau, Eugene E
Description: Student may contact the instructor or department for information.

MusA 2314 Bassoon: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Miller Jr, John W
Description: Student may contact the instructor or department for information.

MusA 2315 French Horn: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Lemen, Caroline May
Description: Student may contact the instructor or department for information.

MusA 2316 Trumpet: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Baldwin, David B
Description: Student may contact the instructor or department for information.

MusA 2318 Euphonium: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Tranter, John Harrington
Description: Student may contact the instructor or department for information.

MusA 2319 Tuba: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Campbell, Steven C
Description: Student may contact the instructor or department for information.
MusA 2321 Percussion: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Meza,Fernando A.
Description: Student may contact the instructor or department for information.

MusA 2323 Guitar: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Radovanlijja,Maja
Description: Student may contact the instructor or department for information.

MusA 3101 Piano: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF
Description: Individual piano instruction by graduate piano TAs for upper-division non-music majors with prior piano study. Weekly 30-minute or 60-minute lessons are arranged individually with the instructor, along with a short jury exam at the end of the semester. Requires permission by the Class Piano Coordinator or a piano TA. Information on applied music fees and how to obtain permission to register may be obtained from the School of Music Office, Room 100 Ferguson Hall, (612) 624-5740, or at http://music.umn.edu/students/Piano%20Ap%201101_3101.pdf
Style: Individual Lessons
Grading: 40% final exam, 60% other evaluation. Weekly lesson preparation
Exam Format: Jury (Individual keyboard performance)

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 3123 Guitar: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Miric, Darka
Description: Student may contact the instructor or department for information.

MusA 3123 Guitar: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Lake, Brendan Scott
Description: Student may contact the instructor or department for information.

MusA 3301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Shaw, Paul Magnus
Description: Student may contact the instructor or department for information.

MusA 3301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Braginsky, Alexander
Description: Student may contact the instructor or department for information.

MusA 3303 Organ: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Billmeyer, Dean W
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: De Haan, John
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

MusA 3305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Kim, Young-Nam
Description: Student may contact the instructor or department for information.

MusA 3305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: O'Reilly, Sally P
Description: Student may contact the instructor or department for information.

MusA 3305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Bjork, Mark P
Description: Student may contact the instructor or department for information.

MusA 3306 Viola: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Konkol, Korey Bernard
Description: Student may contact the instructor or department for information.

MusA 3307 Cello: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Remenikova, Tanya
Description: Student may contact the instructor or department for information.

MusA 3308 Double Bass: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Brown, Christopher Craig
Description: Student may contact the instructor or department for information.

MusA 3309 Flute: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Davis, Immanuel
Description: Student may contact the instructor or department for information.
MusA 3311 Oboe: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Snow, John D
Description: Student may contact the instructor or department for information.

MusA 3312 Clarinet: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Fiterstein, Alexander
Description: Student may contact the instructor or department for information.

MusA 3313 Saxophone: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Wyatt, Angela J.
Description: Student may contact the instructor or department for information.

MusA 3313 Saxophone: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Rousseau, Eugene E
Description: Student may contact the instructor or department for information.

MusA 3314 Bassoon: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Miller Jr, John W
Description: Student may contact the instructor or department for information.

MusA 3315 French Horn: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Lemen, Caroline May
Description: Student may contact the instructor or department for information.

MusA 3315 French Horn: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Gast, Michael C
Description: Student may contact the instructor or department for information.

MusA 3316 Trumpet: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Baldwin, David B
Description: Student may contact the instructor or department for information.

MusA 3317 Trombone: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

MusA 3318 Euphonium: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Tranter, John Harrington
Description: Student may contact the instructor or department for information.

MusA 3321 Percussion: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Meza, Fernando A.
Description: Student may contact the instructor or department for information.

MusA 3322 Harp: Music Major
MusA 5104 Voice: Elective (graduate non-major in music)
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

MusA 5113 Saxophone: Elective (graduate non-major in music)
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Rousseau, Eugene E
Description: Student may contact the instructor or department for information.

MusA 5123 Guitar: Elective (graduate non-major in music)
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Miric, Tanja
Description: Student may contact the instructor or department for information.

MusA 5401 Piano: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: STAFF
Description: Individual piano instruction for graduate music majors who are not piano performance majors. Weekly 30-minute or 60-minute lessons are arranged individually with the instructor, along with a short jury exam at the end of the semester. Information on applied music fees and how to register may be obtained from the School of Music Office, Room 100 Ferguson Hall, or at http://music.umn.edu/students/Piano%20Ap%201401%205401.pdf
Style: Individual lessons
Grading: 40% final exam, 60% other evaluation. Weekly lesson preparation
Exam Format: (Jury) Individual keyboard performance

MusA 5403 Organ: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Billmeyer, Dean W
Description: Student may contact the instructor or department for information.

MusA 5404 Voice: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 5404 Voice: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 5414 Bassoon: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Nielubowski, Norbert John
Description: Student may contact the instructor or department for information.

MusA 5418 Baritone: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

MusA 5423 Guitar: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Radovanlija, Maja
Description: Student may contact the instructor or department for information.

MusA 8301 Piano: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Shaw, Paul Magnus
Description: Student may contact the instructor or department for information.

MusA 8301 Piano: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Artymiw, Lydia
Description: Student may contact the instructor or department for information.

MusA 8301 Piano: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Braginsky, Alexander
Description: Student may contact the instructor or department for information.

MusA 8303 Organ: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Billmeyer, Dean W
Description: Student may contact the instructor or department for information.

MusA 8304 Voice: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 8304 Voice: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

MusA 8304 Voice: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: De Haan, John
Description: Student may contact the instructor or department for information.

MusA 8304 Voice: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 8304 Voice: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

MusA 8305 Violin: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Kim, Young-Nam
Description: Student may contact the instructor or department for information.

MusA 8305 Violin: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: O'Reilly, Sally P
Description: Student may contact the instructor or department for information.
MusA 8305 Violin: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Bjork, Mark P
   Description: Student may contact the instructor or department for information.

MusA 8306 Viola: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Konkol, Korey Bernard
   Description: Student may contact the instructor or department for information.

MusA 8306 Viola: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Turner, Thomas
   Description: Student may contact the instructor or department for information.

MusA 8307 Cello: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Remenikova, Tanya
   Description: Student may contact the instructor or department for information.

MusA 8308 Double Bass: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Brown, Christopher Craig
   Description: Student may contact the instructor or department for information.

MusA 8309 Flute: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Bogorad, Julia A
   Description: Student may contact the instructor or department for information.

MusA 8309 Flute: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Davis, Immanuel
   Description: Student may contact the instructor or department for information.

MusA 8311 Oboe: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Snow, John D
   Description: Student may contact the instructor or department for information.

MusA 8312 Clarinet: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Fiterstein, Alexander
   Description: Student may contact the instructor or department for information.

MusA 8313 Saxophone: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Rousseau, Eugene E
   Description: Student may contact the instructor or department for information.

MusA 8314 Bassoon: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Miller Jr, John W
   Description: Student may contact the instructor or department for information.

MusA 8314 Bassoon: Music Major (graduate)
   A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
   Instructor: Ullery, Charles G
MusA 8315 French Horn: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Gast, Michael C
Description: Student may contact the instructor or department for information.

MusA 8316 Trumpet: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Baldwin, David B
Description: Student may contact the instructor or department for information.

MusA 8317 Trombone: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

MusA 8318 Euphonium: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Tranter, John Harrington
Description: Student may contact the instructor or department for information.

MusA 8319 Tuba: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Campbell, Steven C
Description: Student may contact the instructor or department for information.

MusA 8321 Percussion: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Meza, Fernando A.
Description: Student may contact the instructor or department for information.

MusA 8323 Guitar: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Radovanlijia, Maja
Description: Student may contact the instructor or department for information.

MusA 8324 Accompanying/Coaching: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Lovelace, Timothy
Description: Student may contact the instructor or department for information.

**Music Education 100 Ferguson Hall**

MuEd 1801 Introduction to Music Therapy
A-F only, 2 credit(s);
Instructor: Schwartzberg, Edward Todd
Description: Student may contact the instructor or department for information.

MuEd 3011 Music in Childhood
3 credit(s);
Instructor: Vu, Kinh Tien
Description: Student may contact the instructor or department for information.

MuEd 3302 General Music II
A-F only, 3 credit(s);
Instructor: Addo PhD, Akosua O
Description: Welcome to MUED3302, a course designed to prepare you with materials, strategies and an extensive field experience with expert general music teachers to plan and implement instruction for global arts understanding in general music (upper elementary - middle school). Taking this course will, through experiential learning, prepare you to integrate international music and culture perspectives while planning and implementing sequential music instruction. Together, we will sing, play instruments, sight read, and conduct music from cultures in today's world. We will also read and review articles, play alto recorder and recorder ensembles; plan long term and short-term units, and teach concept and integrated lessons; create melody and accompaniments; and research and analyze intercultural repertoire for general music classes. To be enrolled in this course, you must have completed MUED 3301 General Music Methods I.

Grading: 20% reflection paper.

MuEd 3419 Advanced Conducting and Repertoire (Choral)
A-F only, 2 credit(s);
Instructor: Mehaffey, Matthew Wayne
Description: Student may contact the instructor or department for information.

MuEd 3504 Brass Techniques and Teaching
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Rolandson, David Martin
Description: Student may contact the instructor or department for information.

MuEd 3505 Percussion Techniques and Teaching
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Berberick, David Mark
Description: Student may contact the instructor or department for information.

MuEd 3519 Advanced Conducting and Repertoire (Instrumental)
A-F only, 2 credit(s);
Instructor: Luckhardt, Jerry M
Description: Student may contact the instructor or department for information.

MuEd 3802 Guitar I for Music Education and Music Therapy Majors: Developing Group Songleading Skills
A-F only, 2 credit(s);
Instructor: Schwartzberg, Edward Todd
Description: Student may contact the instructor or department for information.

MuEd 5350 Student Teaching in Classroom Music
A-F only, 4-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Addo PhD, Akosua O
Description: Welcome to a wonderful experience in the real world of teaching. My colleagues and I would like this to be a very positive experience for you. This course experience is designed to give you an opportunity to discuss the challenges and triumphs of learning to teach in elementary general music. Sign up for MuEd5650 Student Teaching seminar for course discussions, debriefing sessions and interactions with other professionals will assist in your transition to the world of public school teaching. Please remember that the triangle of responsibility during student teaching falls on the shoulders of the student teacher, the university supervisor and cooperating teacher. As university supervisors we are here to trouble shoot and facilitate a fulfilling relationship between you and your cooperating teacher. If during this process, you are having any concerns about your placement, it is important that you let us know sooner than later.

MuEd 5450 Student Teaching in Vocal Music
A-F only, 4-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Hamann, Keitha Lucas
Description: Student may contact the instructor or department for information.

MuEd 5550 Student Teaching in Instrumental Music
A-F only, 4-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Sindberg PhD, Laura K
Description: Student may contact the instructor or department for information.

MuEd 5650 Student Teaching Seminar
MuEd 5669 Psychology of Music
A-F only, 2 credit(s);
Instructor: Hamann, Keitha Lucas
Description: Student may contact the instructor or department for information.

MuEd 5750 Topics in Music Education: Teaching Artists: Engaging Community Through Music
A-F only, 3 credit(s), max credits 16, 4 completions allowed;
Instructor: Hamann, Keitha Lucas
Description: Student may contact the instructor or department for information.

MuEd 5803 Therapeutic Management in Music Settings
A-F only, 4 credit(s);
Instructor: Silverman, Michael J
Description: Student may contact the instructor or department for information.

MuEd 5804 Music Therapy Methods and Procedures I
A-F only, 4 credit(s);
Instructor: Schwartzberg, Edward Todd
Description: Student may contact the instructor or department for information.

MuEd 5807 Psychiatric Music Therapy
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Silverman, Michael J
Description: Student may contact the instructor or department for information.

MuEd 5855 Music Therapy Internship
S-N only, 1-13 credit(s), max credits 13, 1 completion allowed;
Instructor: Silverman, Michael J
Description: Student may contact the instructor or department for information.

MuEd 8118 Qualitative Research in Arts Education
A-F only, 3 credit(s);
Instructor: Addo PhD, Akosua O
Description: Student may contact the instructor or department for information.

MuEd 8280 Seminar: Current Trends in Music Education: Curriculum Studies in Music Education
A-F only, 3 credit(s), max credits 30, 10 completions allowed;
Instructor: Sindberg PhD, Laura K
Description: Student may contact the instructor or department for information.

MuEd 8900 Seminar: Music Education Doctoral Seminar
A-F only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: Hamann, Keitha Lucas
Description: This seminar provides a unique opportunity for ongoing research-oriented collaborations between doctoral students and all Music Education & Music Therapy faculty members. Experience gained in this collaborative setting confirms that 1) familiarity with and understanding of primary research in the field are essential and 2) research constitutes a primary component of this advanced learning process, enhancing understanding within the field of music education at large. Collaborative research projects will continue from semester to semester until completed, including the process of conception, critical review of related literature, research design, development of a method, data collection, analysis, interpretation, production of a final written report, and submission for publication. Experience gained in this collaborative setting will clearly illustrate to doctoral students the fact that the most successful educator-scholars are themselves life-long learners through the establishment of an active research agenda.
Style: 100% Discussion.
Grading: 100% special projects.
MuEd 8900 Seminar: Music Education Doctoral Seminar
   A-F only, 1 credit(s), max credits 8, 8 completions allowed;
   Instructor: Lipscomb, Scott D.
   Description: This seminar provides a unique opportunity for ongoing research-oriented collaborations between doctoral students and all Music Education & Music Therapy faculty members. Experience gained in this collaborative setting confirms that 1) familiarity with and understanding of primary research in the field are essential and 2) research constitutes a primary component of this advanced learning process, enhancing understanding within the field of music education at large. Collaborative research projects will continue from semester to semester until completed, including the process of conception, critical review of related literature, research design, development of a method, data collection, analysis, interpretation, production of a final written report, and submission for publication. Experience gained in this collaborative setting will clearly illustrate to doctoral students the fact that the most successful educator-scholars are themselves life-long learners through the establishment of an active research agenda.
   Style: 100% Discussion.
   Grading: 100% special projects.

Nanoparticle Science and Engineering  125 Mechanical Engineering

NPSE 8101 Nanoparticle Science and Engineering Seminar
   S-N only, 1 credit(s);
   Instructor: Stadler, Bethanie J. Hills
   Description: Student may contact the instructor or department for information.

Naval Science  203 Armory

Nav 1000 Professional Training in Naval Science
   S-N only, 1 credit(s);
   Instructor: Washa, Quincy M
   Description: Student may contact the instructor or department for information.

Nav 1101 Introduction to Naval Science
   A-F only, 3 credit(s);
   Instructor: Bastemeyer, Devin James
   Description: Student may contact the instructor or department for information.

Nav 2000 Professional Training in Naval Science
   S-N only, 1 credit(s);
   Instructor: Washa, Quincy M
   Description: Student may contact the instructor or department for information.

Nav 2201 Ship Systems I: Naval Engineering
   A-F only, 3 credit(s);
   Instructor: Marx, Eric Robert
   Description: Student may contact the instructor or department for information.

Nav 3000 Professional Training in Naval Science
   S-N only, 1 credit(s);
   Instructor: Washa, Quincy M
   Description: Student may contact the instructor or department for information.

Nav 3302 Navigation II: Seamanship and Ship Operations
   A-F only, 3 credit(s);
   Instructor: Laird, Angela May
   Description: Student may contact the instructor or department for information.

Nav 4000 Professional Training in Naval Science
   S-N only, 1 credit(s);
   Instructor: Washa, Quincy M
   Description: Student may contact the instructor or department for information.
Nav 4401W Leadership and Management I
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Lauper, William Matthew
Description: Student may contact the instructor or department for information.

Nav 4410 Amphibious Warfare
A-F only, 3 credit(s);
Instructor: Washa, Quincy M
Description: Student may contact the instructor or department for information.

Neurology 12-100 Phillips Wangensteen Bldg (Box 295 UMHC)

Neur 5230 Cerebrovascular Hemodynamics and Diseases I
A-F only, 4 credit(s);
Instructor: Divani, Afshin Andre
Description: Student may contact the instructor or department for information.

Neuroscience 6-145 Jackson Hall

NSc 5201 Computational Neuroscience I: Membranes and Channels
3 credit(s); calculus through differential equations Credit will not be granted if credit has been received for: PHSL 5201;
Instructor: Miller, Robert F
Description: Student may contact the instructor or department for information.

NSc 5461 Cellular and Molecular Neuroscience
A-F only, 4 credit(s);
Instructor: Newman, Eric A
Description: NSc 5461 uses contemporary cellular and molecular approaches to learn about the nervous system. The course includes both class sessions led by a team of faculty, where group discussions and exercises are held, and journal discussion sessions, where students present original research papers. Required for first-year students in the Graduate Program in Neuroscience, the course is also appropriate for graduate students in other programs and advanced undergraduates with previous background in neuroscience.
Style: 67% Lecture, 33% Discussion.
Grading: 20% mid exam, 25% final exam, 10% special projects, 25% quizzes, 10% in-class presentation, 10% class participation.

NSc 5540 Advanced Survey of Biomedical Neuroscience
A-F only, 2 credit(s);
Instructor: Branton, W Dale
Description: Student may contact the instructor or department for information.

NSc 5561 Systems Neuroscience
A-F only, 4 credit(s);
Instructor: Honda, Christopher N
Description: This is an advanced lecture and laboratory course on the principles of organization of neural systems. It is designed for graduate students or advanced undergraduate students in neuroscience or related fields. The objective of this course is to provide a contemporary understanding of neural systems forming the basis for sensation and movement, as well as sensory-motor and neural-endocrine integration. The course is a team-taught comprehensive survey of sensory, motor, autonomic, limbic, and neuroendocrine systems. A combination of lecture and laboratory instruction will stress the relationships between structure and function in the nervous system.
Style: 50% Lecture, 5% Discussion, 45% Laboratory. 5 hours of discussion of research literature.
Grading: 35% laboratory evaluation, 65% other evaluation. lecture information
Exam Format: multiple choice, essay, laboratory practical

NSc 5667 Neurobiology in Disease
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed; instr consent Credit will not be granted if credit has been received for: NSU 5667;
Instructor: Low, Walter C.
Description: Basic clinical/pathological features, pathogenic mechanisms.
NSc 8208 Neuropsychopharmacology  
A-F only, 3 credit(s);  
Instructor: Molitor, Thomas William  
Description: Student may contact the instructor or department for information.

NSc 8216 Selected Topics in Autonomic and Neuroendocrine Regulation  
S-N only, 1 credit(s);  
Instructor: Engeland, William C  
Description: Student may contact the instructor or department for information.

NSc 8217 Systems and Computational Neuroscience  
S-N only, 2 credit(s);  
Instructor: Ghose, Geoffrey M  
Description: The course will be in journal club format, in which participants present and discuss recent original research papers. All interested students, faculty members, and postdocs are encouraged to attend. The course typically attracts participants from a variety of departments and perspectives. Students enrolled in the course will be expected to lead discussion of 1 or 2 papers each session. The course meets from 1:00-2:30 in Jackson 6-135 every Tuesday.

NSc 8222 Central Regulation of Autonomic Function  
A-F only, 3 credit(s);  
Instructor: Engeland, William C  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: McLoon, Steven  
Description: This is a journal club for graduate student, postdocs and faculty. It can be taken for 1 credit, pass/fail, with the instructor's permission.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Fairbanks, Carolyn Ann  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Branton, W Dale  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Pardo, Jose Victor  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Stephens, David William  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Honda, Christopher N  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Kofuji, Paulo  
Description: Student may contact the instructor or department for information.
**NSc 8321 Career Skills and Understanding Responsibilities as a Neuroscientist**  
S-N only, 0.5 credit(s), max credits 2, 4 completions allowed;  
**Instructor:** Engeland, William C  
**Description:** Student may contact the instructor or department for information.

**NSc 8481 Advanced Neuropharmacuetics**  
A-F only, 4 credit(s); instr consent Credit will not be granted if credit has been received for: CMB 8481;  
**Instructor:** Fairbanks, Carolyn Ann  
**Description:** Student may contact the instructor or department for information.

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**Neuroscience Department**  
6-145 Jackson Hall

**Nsci 1001 Fundamental Neuroscience: Understanding Ourselves**  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
**Instructor:** Meisel, Robert L  
**Description:** This course is designed for students interested in a better understanding about how our brains function. There are no prerequisites for the course other than a strong sense of curiosity. The course begins with several lectures that provide a biological foundation to appreciate the intricacies of our brains. These lectures will be easily accessible to students of all backgrounds. Afterwards, using case studies as a basis for understanding general phenomena, students will learn about a variety of topics, including, how our brains observe the world, imagine, fall in love, feel pain, respond to injury, develop, and respond to drugs or psychotherapy. Brain-machine interface technologies and cutting edge findings will also be explored. By taking this course, students will gain an even greater appreciation for the human brain, the most complex machine in existence.  
**Style:** 100% Lecture.  
**Grading:** Each exam 25%  
**Exam Format:** short answer/essay

**Nsci 1100 Human Neuroanatomy**  
4 credit(s); Meets CLE req of Biological Sciences  
**Instructor:** McLoon, Steven  
**Description:** The human nervous system is possibly the most complex, highly evolved biological system. The functional unit of the nervous system is the nerve cell or neuron, and the human nervous system has approximately 10,000 unique types of neurons. Most neurons have a wire-like process, the axon. Neurons carry information to other cells via their axons and communicate with those cells via a transfer of chemicals at synapses. The connections among neurons are organized into functional systems. Disease affecting a small number of cells can affect the function of many parts of the nervous system. This course will provide a broad introduction to the nervous system with an emphasis on the human nervous system. The course will introduce the structure and function of neurons, the major anatomical parts of the nervous system and the main functional systems. Functional systems will be approached through an understanding of the anatomical circuitry. The fundamental concepts of neurochemical communication studied in general terms in the first part of the course will be re-examined relative to specific functional systems later in the course. Although the major focus of the course will be on the normal nervous system, common diseases will be introduced for each main topic. Students will gain an understanding of the nature of many common neurological diseases, which will provide further insight into how the normal nervous system functions. The anatomical substrates of learning/memory, emotions and drug actions will be examined. Through the assigned readings, lectures, and laboratory exercises, students are expected to gain an understanding of the neural circuitry and information processing responsible for the diverse range of human behaviors. This course fulfills LE Biological Sciences Lab Core requirement. The course requires a 2 hour weekly lab as well as the three lectures per week.

**Nsci 3101 Introduction to Neuroscience I: From Molecules to Madness**  
A-F only, 3 credit(s); BIOC 3021 or BIOC 4331 Credit will not be granted if credit has been received for: BIOL 3101;  
**Instructor:** Lanier, Lorene M  
**Description:** This course serves as an introduction to the basic principles of cellular and molecular neurobiology and nervous system function. The main topics include: basic neuroanatomy and cellular organization of the nervous system, ion currents and generation of electrical potentials, synaptic neurotransmission, sensory systems, motor circuits, basal ganglia and cerebellar function, neurodevelopment and plasticity, stem cells and CNS regeneration and the effect of sex hormones on brain development.  
**Style:** 100% Lecture. The course consists of three hours of lecture per week and approximately six hours of preparation and study per week for students  
**Grading:** 97% quizzes, 3% in-class presentation.  
**Exam Format:** multiple choice

**Nsci 4100 Development of the Nervous System: Cellular and Molecular Mechanisms**
Nsci 4794W Directed Research: Writing Intensive

A-F only, 3 credit(s);
Instructor: McLoon, Steven

Description: During development of the nervous system, a great diversity of neuronal types is generated. These neuronal types are defined by morphological, physiological and biochemical characteristics. Neurons also develop complex and precise patterns of interconnections. Normal function of the mature nervous system depends on normal development of these features. This course will examine our current knowledge of how these features develop. General cellular and molecular mechanisms along with the experimental data demonstrating the mechanisms will be emphasized rather than a detailed account of specific developmental events. This course is particularly useful for students that plan to attend medical school or graduate school in the biomedical sciences. It is required for neuroscience majors.

Style: 85% Lecture, 15% Discussion.
Grading: 50% mid exam, 40% final exam, 10% special projects.

Nsci 4105 Neurobiology Laboratory I

A-F only, 3 credit(s);
Instructor: Branton, W Dale

Description: This course serves as an introduction to the principles, methods, and laboratory exercises for investigating neural mechanisms and examining experimental evidence. This course constitutes a part of the core curriculum for Neuroscience majors and is designed to supplement and reinforce the objectives of NSc 3101 by emphasizing experimental approaches to understanding the brain. The course will provide an introduction to the development and structure of the vertebrate brain and the various experimental techniques available for this study. Topics include: Comparative gross and cell anatomy of invertebrate and vertebrate nervous systems; gross dissection of fish and mammalian brains; use of experimental histochemistry and fluorescent tracers to study brain circuitry, neurons and synaptic connections in the rat brain; small animal surgery and microdissection; use of fluorescent, confocal and dissecting microscopes; use of stereotoxic brain atlas. Students can expect 4 hours of laboratory and 2 hours for preparation and analysis per week. The main theme of the course is to learn by observation. The specific observations you make will be mostly self-directed and guided by a written assignment each week. There will be only a limited number of specific exercises with detailed instructions, the rest will depend on your initiative.

Style: 5% Lecture, 95% Laboratory.
Grading: 50% reports/papers, 20% class participation, 30% other evaluation. final oral presentation of laboratory project

Nsci 4105 Neurobiology Laboratory I

A-F only, 3 credit(s);
Instructor: Dubinsky, Janet M

Description: This course serves as an introduction to the principles, methods, and laboratory exercises for investigating neural mechanisms and examining experimental evidence. This course constitutes a part of the core curriculum for Neuroscience majors and is designed to supplement and reinforce the objectives of NSc 3101 and 3102 by emphasizing experimental approaches to understanding the brain. The course will provide an introduction to the development and structure of the vertebrate brain and the various experimental techniques available for this study. Topics include: Comparative gross and cell anatomy of invertebrate and vertebrate nervous systems; gross dissection of fish and mammalian brains; use of experimental histochemistry and fluorescent tracers to study brain circuitry, neurons and synaptic connections in the rat brain; small animal surgery and microdissection; use of fluorescent, confocal and dissecting microscopes; use of stereotoxic brain atlas. The class will discuss, develop and practice teamwork and problem solving skills. Students can expect 4 hours of laboratory and 2 hours for preparation and analysis per week. The main theme of the course is to learn by observation. The specific observations you make will be mostly self-directed and guided by short and long term class projects. There will be only a limited number of specific exercises with detailed instructions, the rest will depend on your initiative.

Style: 5% Lecture, 85% Laboratory, 10% Student Presentation.

Nsci 4793W Directed Studies: Writing Intensive

S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: STAFF

Description: Individual study of selected topics with emphasis on readings and use of scientific literature. This course is writing intensive. Students will have the opportunity to write a review article on a topic in their discipline of interest. They will learn to survey the current literature in a specific area of research, organize the data available relevant to the research topic, and effectively communicate this information in their paper. Also, students will draw conclusions from their investigations of the research topic and suggest directions for future research. Students are required to write a 10-15 page paper in the format of a scientific review article. An extensive survey of the literature will be required in order to present the most current information in the selected research area. This course is graded pass/fail, and the final grade is based on successful completion of the review article.

Grading: 100% reports/papers.

Nsci 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course consists of laboratory or field investigation of selected areas of research, done under the direction of a faculty mentor. The course is writing intensive. Students will have the opportunity to present the results of their research in the format of a scientific article. They will learn to survey the current literature in their area of research, organize data, use statistical analyses if appropriate, and effectively communicate the results of their experiments through construction of tables, graphs, and other figures. Also, students will draw conclusions from their data and use persuasive arguments to convince readers of their interpretations of the data. Students will be required to write a 10-15 page paper in the format of a scientific article. This course is graded pass/fail, and the final grade is based on successful completion of the article.
Grading: 100% reports/papers.

Nsci 4993 Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Nsci 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Nsci 5101 Introduction to Neuroscience for Graduate Students
A-F only, 3 credit(s);
Instructor: Lanier, Lorene M
Description: This course serves as an introduction to the basic principles of cellular and molecular neurobiology and nervous system function. The main topics include: basic neuroanatomy and cellular organization of the nervous system, ion currents and generation of electrical potentials, synaptic neurotransmission, sensory systems, motor circuits, basal ganglia and cerebellar function, neurodevelopment and plasticity, stem cells and CNS regeneration and the effect of sex hormones on brain development.
Style: 100% Lecture.
Grading: 27% reports/papers, 70% quizzes, 3% in-class presentation. The course is graded on a straight percent scale. There will NOT be a curve.
Exam Format: multiple choice

Norwegian 320 Folwell Hall

Nor 1001 Beginning Norwegian
5 credit(s); Credit will not be granted if credit has been received for: NOR 4001;
Instructor: Zmijewska-Emerson, Hanna
Description: This is the first course in the first-year language instruction sequence (1001-2), designed to develop a basic communicative proficiency in Norwegian. Students will practice the four language skills (speaking, writing, reading, and listening) and learn to handle simple, everyday transactions. Class sessions will emphasize interactive communicative activities in pairs and small groups, with a focus on improving listening and speaking skills. Additional class time will be spent on reading, writing, and grammar. Students are expected to practice these skills outside of class as well. Learning about life and culture in Norway is an integral part of the course. See description for Nor 4001 for an option for qualified students to register for this course for 2 credits (and lower tuition) instead of 4 credits.
Style: 5% Lecture, 25% Discussion, 25% Laboratory, 25% Small Group Activities, 20% Student Presentation.
Grading: 15% final exam, 10% reports/papers, 35% quizzes, 7% additional semester exams, 27% attendance, 6% in-class presentation.

Nor 1001 Beginning Norwegian
5 credit(s); Credit will not be granted if credit has been received for: NOR 4001;
Instructor: Ianeva-Lockney, Arsena
Description: Student may contact the instructor or department for information.

Nor 1003 Intermediate Norwegian
5 credit(s); 1002 Credit will not be granted if credit has been received for: NOR 4003;
Instructor: Zmijewska-Emerson, Hanna
Description: Norwegian 1003 and 1004 are the last two courses in the four semester proficiency-based language sequence. They are designed to review and expand your knowledge of Norwegian language structure?grammar and syntax?and to extend your
comprehension and communicative abilities in the language. The primary text is "Stein p? Stein" It consists of a textbook, a work book and a CD. They help you work with the language in variety of media and forms that complement each other. The type of classroom environment fostered in our language program is student-centered rather than teacher-centered. You can expect, for example, to make your own vocabulary associations on chapter topics and share these lists with other students. You will be asked to practice speaking with a partner and in small groups. You will answer questions about things we read and view in class. During listening activities you may be asked to fill-in missing dialogue, listen for specific words or phrases, or get the gist of a text.

**Style:** 10% Lecture, 40% Discussion, 10% Laboratory, 30% Small Group Activities, 10% Student Presentation.

**Grading:** 15% final exam, 10% reports/papers, 30% quizzes, 10% additional semester exams, 28% attendance, 7% in-class presentation.

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**Nor 4001 Beginning Norwegian**

2 credit(s);1004 in another language or passing score on LPE or grad student

*Credit will not be granted if credit has been received for:* NOR 1001;

**Instructor:** Zmijewska-Emerson,Hanna

**Description:** This is the first course in the first-year language instruction sequence (1001-2), designed to develop a basic communicative proficiency in Norwegian. Students will practice the four language skills (speaking, writing, reading, and listening) and learn to handle simple, everyday transactions. Class sessions will emphasize interactive communicative activities in pairs and small groups, with a focus on improving listening and speaking skills. Additional class time will be spent on reading, writing, and grammar. Students are expected to practice these skills outside of class as well. Learning about life and culture in Norway is an integral part of the course. See description for Nor 4001 for an option for qualified students to register for this course for 2 credits (and lower tuition) instead of 4 credits.

**Style:** 5% Lecture, 25% Discussion, 25% Laboratory, 25% Small Group Activities, 20% Student Presentation.

**Grading:** 15% final exam, 10% reports/papers, 35% quizzes, 7% additional semester exams, 27% attendance, 6% in-class presentation.

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**Nor 4001 Beginning Norwegian**

2 credit(s);1004 in another language or passing score on LPE or grad student

*Credit will not be granted if credit has been received for:* NOR 1001;

**Instructor:** Ianeva-Lockney,Arsena

**Description:** This is the first course in the first-year language instruction sequence (1001-2), designed to develop a basic communicative proficiency in Norwegian. Students will practice the four language skills (speaking, writing, reading, and listening) and learn to handle simple, everyday transactions. Class sessions will emphasize interactive communicative activities in pairs and small groups, with a focus on improving listening and speaking skills. Additional class time will be spent on reading, writing, and grammar. Students are expected to practice these skills outside of class as well. Learning about life and culture in Norway is an integral part of the course. See description for Nor 4001 for an option for qualified students to register for this course for 2 credits (and lower tuition) instead of 4 credits.

**Style:** 5% Lecture, 25% Discussion, 25% Laboratory, 25% Small Group Activities, 20% Student Presentation.

**Grading:** 15% final exam, 10% reports/papers, 35% quizzes, 7% additional semester exams, 27% attendance, 6% in-class presentation.

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**Nor 4003 Intermediate Norwegian**

2 credit(s);1004 in another language or passing score on LPE or grad student

*Credit will not be granted if credit has been received for:* NOR 1003;

**Instructor:** Zmijewska-Emerson,Hanna

**Description:** Norwegian 1003 and 1004 are the last two courses in the four semester proficiency-based language sequence. They are designed to review and expand your knowledge of Norwegian language structure?gramma and syntax?and to extend your comprehension and communicative abilities in the language. The students continue to practice all four modalities: listening, speaking, reading and writing. The primary text is "Stein p? Stein" It consists of a textbook, a work book and a CD. They help you work with the language in variety of media and forms that complement each other. The type of classroom environment fostered in our language program is student-centered rather than teacher-centered. You can expect, for example, to make your own vocabulary associations on chapter topics and share these lists with other students. You will be asked to practice speaking with a partner and in small groups. You will answer questions about things we read and view in class. During listening activities you may be asked to fill-in missing dialogue, listen for specific words or phrases, or get the gist of a text.

**Style:** 10% Lecture, 40% Discussion, 10% Laboratory, 30% Small Group Activities, 10% Student Presentation.

**Grading:** 15% final exam, 10% reports/papers, 30% quizzes, 10% additional semester exams, 28% attendance, 7% in-class presentation.
Nurs 1020 Challenge of Nursing
S-N only, 1 credit(s);
Instructor: Adwan, Jehad Zaki
Description: NURS 1020: The Challenge of Nursing Course Description This course presents an overview of the profession of nursing. A view of contemporary nursing and its historical roots and stages are discussed. Career opportunities and challenges of nursing are examined. Course Objectives At the conclusion of this course you will be able to: 1. Describe contemporary nursing practice. 2. Recognize the importance of nursing research to nursing practice. Student Learning Outcome Understand the role of creativity, innovation, discovery, and expression across disciplines Grade Base: S/N only Course Prerequisites: None Faculty Jehad Adwan, PhD, RN Clinical Assistant Professor Office: 6-138A WDH Phone: (612) 625-0430 E-mail: adwan001@umn.edu

Nurs 1030 Profession of Nursing Seminar
A-F only, 1 credit(s);
Instructor: Alaniz PhD, Karin Lue
Description: Freshmen guarantee nursing students will learn about the profession of nursing including options for educational preparation, specialty areas, research opportunities and current issues and trends.
Style: 10% Lecture, 20% Discussion, 60% Guest Speakers, 10% Service Learning.

Nurs 1910W Freshman Seminar: Chronic Illness in the US from Cell to Society
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Gaugler PhD, Joseph E
Description: This course will explore four of the most common chronic illnesses among the adult U.S. population. Our goal is to understand the biological mechanisms of, clinical treatment strategies for, and psychosocial ramifications of each of these chronic illnesses.
Style: 25% Discussion, 30% Guest Speakers, 5% Web Based.
Grading: 50% reports/papers, 20% quizzes, 20% attendance, 10% in-class presentation, 10% class participation.

Nurs 2001 Human Growth and Development: A Life Span Approach
3 credit(s);
Instructor: Alaniz PhD, Karin Lue
Description: Theoretical, personal and culturally determined views of human life span development are examined from the prenatal period through the dying experience. Grand and emergent theories are applied to the biosocial, cognitive and psychosocial domains of life span development.
Style: 80% Lecture, 10% Film/Video, 10% Discussion, 5% Small Group Activities.
Grading: 20% reports/papers, 60% quizzes, 20% attendance.

Nurs 2001 Human Growth and Development: A Life Span Approach
3 credit(s);
Instructor: Hamilton, Ella Kathryn
Description: Theoretical, personal and culturally determined views of human life span development are examined from the prenatal period through the dying experience. Grand and emergent theories are applied to the biosocial, cognitive and psychosocial domains of life span development.
Style: 80% Lecture, 5% Film/Video, 10% Discussion, 5% Small Group Activities.
Grading: 20% reports/papers, 60% quizzes, 20% attendance.

Nurs 3115 Health Informatics and Information Technology
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Kerr, Madeleine June
Description: Student may contact the instructor or department for information.

Nurs 3690 Life Span, Growth, and Development I
2 credit(s);
Instructor: Davis PhD, Joan Audray
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This course uses a life span perspective to explore transitions and changes from conception through early adulthood. It provides students with a broad background in human growth and development across the life span. Nurses and other health care professionals need to understand normal development in order to effectively help people deal with health problems. This course provides a good foundation for further study in a specialty area, and many students will choose to take
additional courses that deal with specific developmental periods. The course will appeal to a broad range of students who are interested in learning about the biosocial, cognitive, and psychosocial forces that shape human lives.

**Style:** This is a printed correspondence section.

**Grading:**
- Written assignments = 80 points
- Midcourse exam = 60 points
- Final exam = 60 points

**Exam Format:** Supervised, in-person exams.

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**Nurs 3691 Life Span, Growth, and Development II**

1 credit(s);

**Instructor:** Davis PhD, Joan Audray

**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course we use a life span perspective to explore transitions and changes in middle and late adult development. The course provides students with a broad background in human growth and development across the life span. Nurses and other health care professionals need to understand normal development in order to effectively help people deal with health problems. This course provides a good foundation for further study in a specialty area, and many students will choose to take additional courses that deal with specific developmental periods. This course will appeal to a broad range of students who are interested in learning about the biosocial, cognitive, and psychosocial forces that shape human lives.

**Style:** This is a printed correspondence section.

**Grading:** 60% final exam, 40% written homework. If you register for the S/N grade option, your average must be at least 70% to receive an S (satisfactory). We encourage prenursing and nursing students to take the course A-F if they want to have the course count in their accumulated GPA.

**Exam Format:** Supervised, in-person (not online) exam.

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**Nurs 3703 Assessment and Beginning Interventions: Nursing Lab 1**

A-F only, 2 credit(s);

**Instructor:** Flaten, Carol

**Description:** Student may contact the instructor or department for information.

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**Nurs 3710 Statistics for Clinical Practice and Research**

3 credit(s); Meets CLE req of Mathematical Thinking

**Instructor:** Findorff, Mary Jocelyn

**Description:** Student may contact the instructor or department for information.

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**Nurs 3801 Patient Centered Care of Adults/Older Adults I**

A-F only, 3 credit(s);

**Instructor:** Schmitz, Barbara J

**Description:** Student may contact the instructor or department for information.

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**Nurs 3801 Patient Centered Care of Adults/Older Adults I**

A-F only, 3 credit(s);

**Instructor:** Dunlap, Karen J

**Description:** Student may contact the instructor or department for information.

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**Nurs 3802 Patient Centered Care: Nursing Care of Families I**

A-F only, 3 credit(s);

**Instructor:** Adwan, Jehad Zaki

**Description:** Student may contact the instructor or department for information.

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**Nurs 3806 Nurse as Professional**

A-F only, 2 credit(s);

**Instructor:** Schmitz, Barbara J

**Description:** Student may contact the instructor or department for information.

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**Nurs 3806 Nurse as Professional**

A-F only, 2 credit(s);

**Instructor:** Kumpula EdD, Renee

**Description:** Student may contact the instructor or department for information.
Nurs 3806H Nurse as Professional: Honors
   A-F only, 3 credit(s);
   Instructor: Duckett, Laura J
   Description: Student may contact the instructor or department for information.

Nurs 4104 Ethical Sensitivity and Reasoning in Health Care
   A-F only, 2 credit(s); Meets CLE req of Civic Life and Ethics
   Instructor: Schmitz, Barbara J
   Description: Student may contact the instructor or department for information.

Nurs 4104 Ethical Sensitivity and Reasoning in Health Care
   A-F only, 2 credit(s); Meets CLE req of Civic Life and Ethics
   Instructor: Kristofersson, Gisli Kort
   Description: Student may contact the instructor or department for information.

Nurs 4106 Nurse as Collaborator
   A-F only, 2 credit(s);
   Instructor: Rowan, Mary M.
   Description: Student may contact the instructor or department for information.

Nurs 4301 Person Centered Care of Adults and Older Adults II
   A-F only, 4 credit(s);
   Instructor: Steffes, Mary Teresa
   Description: Student may contact the instructor or department for information.

Nurs 4301 Person Centered Care of Adults and Older Adults II
   A-F only, 4 credit(s);
   Instructor: Schmitz, Barbara J
   Description: Student may contact the instructor or department for information.

Nurs 4303 Practicum: Person Centered Care of Adults in Acute Care
   A-F only, 3 credit(s);
   Instructor: Dean EdD, Patrick Joseph
   Description: Student may contact the instructor or department for information.

Nurs 4303 Practicum: Person Centered Care of Adults in Acute Care
   A-F only, 3 credit(s);
   Instructor: Steffes, Mary Teresa
   Description: Student may contact the instructor or department for information.

Nurs 4305 Practicum: Community-based Care of Families Across Life Span
   A-F only, 3 credit(s);
   Instructor: Findorff, Mary Jocelyn
   Description: Student may contact the instructor or department for information.

Nurs 4305 Practicum: Community-based Care of Families Across Life Span
   A-F only, 3 credit(s);
   Instructor: Larson, Karin J
   Description: Student may contact the instructor or department for information.

Nurs 4305 Practicum: Community-based Care of Families Across Life Span
   A-F only, 3 credit(s);
   Instructor: Pfeiffer, Jeanne
   Description: Student may contact the instructor or department for information.

Nurs 4312 Patient Centered Care: Nursing Care of Families II
   A-F only, 4 credit(s);
   Instructor: Larson, Karin J
Nurs 4321 Public Health Nursing  
A-F only, 2 credit(s);  
Instructor: Flaten, Carol  
Description: Student may contact the instructor or department for information.

Nurs 4402 Taking Ethical Action in Health Care  
A-F only, 1 credit(s); Meets CLE req of Civic Life and Ethics  
Instructor: O'Conner-Von PhD, Susan K.  
Description: Student may contact the instructor or department for information.

Nurs 4402 Taking Ethical Action in Health Care  
A-F only, 1 credit(s); Meets CLE req of Civic Life and Ethics  
Instructor: Zins, Savannah M  
Description: Student may contact the instructor or department for information.

Nurs 4404V Honors: Applied Research and Research Utilization  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Duckett, Laura J  
Description: Student may contact the instructor or department for information.

Nurs 4430 Immunization Tour  
S-N only, 1 credit(s); 4202, level II nursing student, instr consent Credit will not be granted if credit has been received for: PHAR 6210;  
Instructor: Pfeiffer, Jeanne  
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I  
A-F only, 6 credit(s);  
Instructor: Steffes, Mary Teresa  
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I  
A-F only, 6 credit(s);  
Instructor: Goering, Mary Rebecca DeGrote  
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I  
A-F only, 6 credit(s);  
Instructor: Adwan, Jehad Zaki  
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I  
A-F only, 6 credit(s);  
Instructor: Rhudy, Lori M  
Description: Student may contact the instructor or department for information.

Nurs 4706 Transition to Practice  
A-F only, 1 credit(s);  
Instructor: Martin, Lisa  
Description: Student may contact the instructor or department for information.

Nurs 4706 Transition to Practice  
A-F only, 1 credit(s);  
Instructor: Davidson, Lars E  
Description: Student may contact the instructor or department for information.
Nurs 4777W Senior Project in the Nursing Major
A-F only, 3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Lindquist, Ruth Ann
Description: Student may contact the instructor or department for information.

Nurs 4777W Senior Project in the Nursing Major
A-F only, 3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Dean EdD, Patrick Joseph
Description: Student may contact the instructor or department for information.

Nurs 4777W Senior Project in the Nursing Major
A-F only, 3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Rowan, Mary M.
Description: Student may contact the instructor or department for information.

Nurs 4777W Senior Project in the Nursing Major
A-F only, 3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Writing Intensive
Instructor: Cheung, Corjena K
Description: Student may contact the instructor or department for information.

Nurs 4800 Nursing Topics: Nursing Topics: Immunization Tour
0-16 credit(s), max credits 48, 3 completions allowed;
Instructor: Dean EdD, Patrick Joseph
Description: Students, along with faculty, will prepare themselves for mass immunizations of the flu vaccine to residents of Olmsted County, and following CDC guidelines will administer the flu vaccine in organized flu clinics through Olmsted County Public Health and UMR student health resources.

Nurs 4800 Nursing Topics: Nursing Topics: Phillips Neighborhood Clinic
0 credit(s), max credits 48, 3 completions allowed;
Instructor: Rowan, Mary M.
Description: Student may contact the instructor or department for information.

Nurs 4800 Nursing Topics
2 credit(s), max credits 48, 3 completions allowed;
Instructor: Sieving, Renee Evangeline
Description: Student may contact the instructor or department for information.

Nurs 4801 Research Topics
1 credit(s), max credits 16, 1 completion allowed;
Instructor: Darst, Elaine
Description: Student may contact the instructor or department for information.

Nurs 5010 Foundations of Interprofessional Communication and Collaboration
S-N only, 1 credit(s);
Instructor: Rowan, Mary M.
Description: Student may contact the instructor or department for information.

Nurs 5016 Critical Reading of Scientific Literature in Adolescent Health
1 credit(s);
Instructor: Sieving, Renee Evangeline
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Martin, Lisa
Description: Student may contact the instructor or department for information.
Nurs 5029 Introduction to Nursing Interventions
   A-F only, 4 credit(s);
   Instructor: Zaccagnini, Mary E
   Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
   A-F only, 4 credit(s);
   Instructor: Kessler, Penny
   Description: Student may contact the instructor or department for information.

Nurs 5030 Foundational Concepts of Professional Nursing
   A-F only, 3 credit(s);
   Instructor: Cheung, Corjena K
   Description: Student may contact the instructor or department for information.

Nurs 5034 Clinical Seminar: Nursing Care of Clients With Complex Health Conditions
   A-F only, 2 credit(s);
   Instructor: Potter PhD, Teddie Michelle
   Description: Exemplar cases from the students' clinical settings provide the basis for development of clinical decision-making though critical analysis of current and emergent nursing care issues associated with caring for complex and diverse populations.

Nurs 5035 Practical Nursing Care for Complex Health Conditions
   A-F only, 4 credit(s);
   Instructor: Carlyon, Linda Rae
   Description: Student may contact the instructor or department for information.

Nurs 5035 Practical Nursing Care for Complex Health Conditions
   A-F only, 4 credit(s);
   Instructor: Pfeiffer, Jeanne
   Description: Student may contact the instructor or department for information.

Nurs 5035 Practical Nursing Care for Complex Health Conditions
   A-F only, 4 credit(s);
   Instructor: Friedrich, Cheri L
   Description: Student may contact the instructor or department for information.

Nurs 5035 Practical Nursing Care for Complex Health Conditions
   A-F only, 4 credit(s);
   Instructor: Kessler, Penny
   Description: Student may contact the instructor or department for information.

Nurs 5035 Practical Nursing Care for Complex Health Conditions
   A-F only, 4 credit(s);
   Instructor: Hoffman, Sarah James
   Description: Student may contact the instructor or department for information.

Nurs 5040H Seeking Solutions to Global Health Issues
   A-F only, 3 credit(s); Meets CLE req of Global Perspectives
   Instructor: Martin, Lisa
   Description: Student may contact the instructor or department for information.

Nurs 5115 Interprofessional Health Care Informatics
   A-F only, 3 credit(s);
   Instructor: Swanson, Mary Jo
   Description: Student may contact the instructor or department for information.

Nurs 5115 Interprofessional Health Care Informatics
   A-F only, 3 credit(s);
Instructor: Monsen PhD, Karen A  
Description: Student may contact the instructor or department for information.

Nurs 5116 Consumer Health Informatics  
A-F only, 1 credit(s);  
Instructor: Westra, Bonnie L.  
Description: Student may contact the instructor or department for information.

Nurs 5117 Consumer Health Informatics Practicum  
S-N only, 1 credit(s);  
Instructor: Westra, Bonnie L.  
Description: Student may contact the instructor or department for information.

Nurs 5190 Essentials of Holistic Health Assessment  
A-F only, 3 credit(s);  
Instructor: Fjone, Andra Lynn  
Description: Student may contact the instructor or department for information.

Nurs 5200 Holistic Health Assessment and Therapeutics for Advanced Practice Nurses  
3 credit(s);  
Instructor: Fjone, Andra Lynn  
Description: Student may contact the instructor or department for information.

Nurs 5222 Advanced Physiology  
3 credit(s);  
Instructor: Biltz MD, George R  
Description: Student may contact the instructor or department for information.

Nurs 5222 Advanced Physiology  
3 credit(s);  
Instructor: Sanchez, Otto Alesander  
Description: Student may contact the instructor or department for information.

Nurs 5228 Pharmacology for Advanced Practice Nursing  
A-F only, 2 credit(s);  
Instructor: Lichtblau PhD, Leonard  
Description: Student may contact the instructor or department for information.

Nurs 5241 Nursing Leadership for Effective Practice  
A-F only, 3 credit(s);  
Instructor: Friedrich, Cheri L  
Description: Student may contact the instructor or department for information.

Nurs 5800 Nursing Topics  
1 credit(s), max credits 8, 4 completions allowed;  
Instructor: Fulkerson, Jayne  
Description: Student may contact the instructor or department for information.

Nurs 5800 Nursing Topics: AdvPublicHealthNur: DisseminationOfCulturalImmersi  
1 credit(s), max credits 8, 4 completions allowed;  
Instructor: Monsen PhD, Karen A  
Description: Student may contact the instructor or department for information.

Nurs 5800 Nursing Topics: Nursing Topics: Leadership Practicum  
2-4 credit(s), max credits 8, 4 completions allowed;  
Instructor: Darst, Elaine  
Description: Student may contact the instructor or department for information.
Nurs 6100 Evidence-based Practice  
A-F only, 3 credit(s);  
Instructor: Rhudy, Lori M  
Description: Student may contact the instructor or department for information.

Nurs 6100 Evidence-based Practice  
A-F only, 3 credit(s);  
Instructor: Yu, Fang  
Description: Student may contact the instructor or department for information.

Nurs 6102 Family Health Care Theory for Nursing  
2 credit(s);  
Instructor: Garwick, Ann Elizabeth Williams  
Description: Student may contact the instructor or department for information.

Nurs 6200 Science of Nursing Intervention  
A-F only, 3 credit(s);  
Instructor: Lindquist, Ruth Ann  
Description: Student may contact the instructor or department for information.

Nurs 6213 Reproductive Healthcare for Women at Risk  
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Larson, Karin J  
Description: Student may contact the instructor or department for information.

Nurs 6214 Reproductive Healthcare for Women at Risk Practicum  
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Schadewald, Diane Marie  
Description: Student may contact the instructor or department for information.

Nurs 6214 Reproductive Healthcare for Women at Risk Practicum  
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Larson, Karin J  
Description: Student may contact the instructor or department for information.

Nurs 6305 Women's Reproductive Healthcare  
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Schadewald, Diane Marie  
Description: Student may contact the instructor or department for information.

Nurs 6306 Women's Reproductive Healthcare Practicum  
S-N only, 1-6 credit(s), max credits 6, 4 completions allowed;  
Instructor: Schadewald, Diane Marie  
Description: Student may contact the instructor or department for information.

Nurs 6306 Women's Reproductive Healthcare Practicum  
S-N only, 1-6 credit(s), max credits 6, 4 completions allowed;  
Instructor: Ringdahl, Deborah Rene  
Description: Student may contact the instructor or department for information.

Nurs 6405 Advanced Practice CNS Roles Across the Lifespan  
A-F only, 3 credit(s);  
Instructor: Hadidi, Niloufar Niakosari  
Description: Student may contact the instructor or department for information.

Nurs 6406 Advanced Practice CNS Roles Across the Lifespan: Practicum  
S-N only, 1 credit(s);
Instructor: Hadidi, Niloufar Niakosari  
Description: Student may contact the instructor or department for information.

Nurs 6407 Advanced Nursing Care of Older Adults  
A-F only, 3 credit(s);  
Instructor: Talley, Kristine Marie  
Description: Student may contact the instructor or department for information.

Nurs 6408 Advanced Nursing Care of Older Adults Practicum  
S-N only, 1 credit(s);  
Instructor: Dierich, Mary Therese  
Description: Student may contact the instructor or department for information.

Nurs 6501 Assessment and Management of Health for Advanced Practice Nurses, I  
A-F only, 3 credit(s);  
Instructor: Yu, Fang  
Description: Student may contact the instructor or department for information.

Nurs 6600 Health Systems and Care Models  
3 credit(s);  
Instructor: Potter PhD, Teddie Michelle  
Description: Student may contact the instructor or department for information.

Nurs 6602 PMH Advanced Practice Nursing: Group as a Health Care Intervention  
2 credit(s);  
Instructor: Kaas, Merrie Jean  
Description: Student may contact the instructor or department for information.

Nurs 6603 PMH APN Practicum IV: Group as a Health Care Intervention  
2 credit(s);  
Instructor: Kaas, Merrie Jean  
Description: Student may contact the instructor or department for information.

Nurs 6604 Foundations for Integrative Mental Health and Psychiatric Advanced Practice Nursing  
2 credit(s);  
Instructor: Vanderhoef, Dawn  
Description: Student may contact the instructor or department for information.

Nurs 6605 Psychiatric/Mental Health Advanced Nursing Practice Practicum I  
1 credit(s);  
Instructor: Vanderhoef, Dawn  
Description: Student may contact the instructor or department for information.

Nurs 6702 Executive Leadership Seminar  
S-N only, 3 credit(s);  
Instructor: Potter PhD, Teddie Michelle  
Description: Student may contact the instructor or department for information.

Nurs 6705 Executive Leadership Seminar III: Quality and Change Management  
1 credit(s);  
Instructor: Disch, Joanne M  
Description: Student may contact the instructor or department for information.

Nurs 6706 Executive Leadership Practicum II: Quality and Change Management  
S-N only, 1 credit(s);  
Instructor: Disch, Joanne M  
Description: Student may contact the instructor or department for information.
Nurs 6901 Basic Nurse Anesthesia Principles
  A-F only, 3 credit(s);
  Instructor: White, Kathryn W
  Description: Student may contact the instructor or department for information.

Nurs 6911 Basic Nurse Anesthesia Principles Practicum
  S-N only, 3 credit(s);
  Instructor: White, Kathryn W
  Description: Student may contact the instructor or department for information.

Nurs 6922 Primary Care: Assessment and Management of Common Conditions Affecting Children
  A-F only, 3 credit(s);
  Instructor: Poe, Christine R
  Description: Student may contact the instructor or department for information.

Nurs 6923 Primary Care Practicum: Assessment and Management of Common Conditions Affecting Children
  A-F only, 2 credit(s);
  Instructor: Poe, Christine R
  Description: Student may contact the instructor or department for information.

Nurs 6924 Assessment and Interventions for Children and Youth With Special Health Care Needs
  2 credit(s);
  Instructor: O'Conner-Von PhD, Susan K.
  Description: Student may contact the instructor or department for information.

Nurs 6929 Advanced Nursing Care of Children with Acute Illness Practicum for PCNS
  A-F only, 2 credit(s);
  Instructor: Hooke, Mary Catherine M
  Description: Student may contact the instructor or department for information.

Nurs 6930 Foundations of Advanced Public Health Nursing Practice
  A-F only, 3 credit(s);
  Instructor: Olson Keller, Linda
  Description: Student may contact the instructor or department for information.

Nurs 6935 Population Focused Public Health Nursing Practice: Program Planning and Development
  A-F only, 2 credit(s);
  Instructor: Robertson, Cheryl Lee
  Description: Student may contact the instructor or department for information.

Nurs 7000 DNP Proseminar
  1 credit(s);
  Instructor: Ringdahl, Deborah Rene
  Description: Student may contact the instructor or department for information.

Nurs 7004 Nurse Anesthesia Practicum A
  S-N only, 5 credit(s);
  Instructor: White, Kathryn W
  Description: Student may contact the instructor or department for information.

Nurs 7100 DNP Seminar I
  A-F only, 2 credit(s);
  Instructor: Lindeke PhD, Linda L
  Description: Student may contact the instructor or department for information.
Instructor: Chesney PhD, Mary L
Description: Student may contact the instructor or department for information.

Nurs 7102 DNP Seminar III
A-F only, 2 credit(s);
Instructor: Lindeke PhD, Linda L
Description: Student may contact the instructor or department for information.

Nurs 7103 Nursing Research Methods
3 credit(s);
Instructor: Bearinger, Linda Holm
Description: Student may contact the instructor or department for information.

Nurs 7108 Population Health Informatics
A-F only, 2 credit(s);
Instructor: Monsen PhD, Karen A
Description: Student may contact the instructor or department for information.

Nurs 7109 Population Health Informatics Practicum
S-N only, 2 credit(s);
Instructor: Monsen PhD, Karen A
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Halcon PhD, Linda Luciente
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Lindquist, Ruth Ann
Description: Student may contact the instructor or department for information.

Nurs 7202 Moral and Ethical Positions and Actions in Nursing
A-F only, 2 credit(s);
Instructor: Duckett, Laura J
Description: Student may contact the instructor or department for information.

Nurs 7202 Moral and Ethical Positions and Actions in Nursing
A-F only, 2 credit(s);
Instructor: Liaschenko, Joan
Description: Student may contact the instructor or department for information.

Nurs 7209 Integrative Health and Healing
1 credit(s);
Instructor: Ringdahl, Deborah Rene
Description: Student may contact the instructor or department for information.

Nurs 7210 Integrative Health and Healing Practicum I
S-N only, 1 credit(s);
Instructor: Ringdahl, Deborah Rene
Description: Student may contact the instructor or department for information.

Nurs 7211 Integrative Health and Healing II
A-F only, 1 credit(s);
Instructor: Halcon PhD, Linda Luciente
Description: Student may contact the instructor or department for information.
Nurs 7212 Integrative Health and Healing Practicum II
S-N only, 2 credit(s);
Instructor: Ringdahl, Deborah Rene
Description: Student may contact the instructor or department for information.

Nurs 7300 Program Evaluation
A-F only, 3 credit(s);
Instructor: Findorff, Mary Jocelyn
Description: Student may contact the instructor or department for information.

Nurs 7500 Health Care of Children for the Family Nurse Practitioner
A-F only, 3 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7501 Health Care of Children for the Family Nurse Practitioner Practicum
S-N only, 1 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7504 Assessment and Management of Health for Advanced Practice Nurses, Practicum I
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Schadewald, Diane Marie
Description: Student may contact the instructor or department for information.

Nurs 7506 Family Practice Practicum III: Assessment and Management of Health for the Family Nurse Practitioner
S-N only, 1 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7610 Health Innovations and Leadership
A-F only, 3 credit(s);
Instructor: Edwardson, Sandra R
Description: Student may contact the instructor or department for information.

Nurs 7900 Scholarship of Teaching and Learning in Nursing
3 credit(s);
Instructor: Kaas, Merrie Jean
Description: Student may contact the instructor or department for information.

Nurs 8121 Health Behaviors and Illness Responses
A-F only, 3 credit(s);
Instructor: Henly,Susan J  
Description: Student may contact the instructor or department for information.

**Nurs 8152 Scholarship in Health Care Ethics**  
A-F only, 3 credit(s);  
**Instructor:** Liaschenko,Joan  
**Description:** Student may contact the instructor or department for information.

**Nurs 8172 Theory and Theory Development for Research**  
3 credit(s);  
**Instructor:** Peden-McAlpine,Cynthia Jeanne  
**Description:** Student may contact the instructor or department for information.

**Nurs 8173 Principles and Methods of Implementing Research**  
3 credit(s); 8114 or other 8xxx grad research methods course, 2 grad stat courses; Credit will not be granted if credit has been received for: SAPH 8173;  
**Instructor:** Gross,Cynthia R  
**Description:** Student may contact the instructor or department for information.

**Nurs 8175 Quantitative Research Design and Methods**  
A-F only, 3 credit(s);  
**Instructor:** Bliss PhD,Donna Zimmaro  
**Description:** Student may contact the instructor or department for information.

**Nurs 8177 Advanced Nursing Research Practicum**  
S-N only, 2 credit(s);  
**Instructor:** Halcon PhD,Linda Luciente  
**Description:** Student may contact the instructor or department for information.

**Nurs 8177 Advanced Nursing Research Practicum**  
S-N only, 2 credit(s);  
**Instructor:** O'Conner-Von PhD,Susan K.  
**Description:** Student may contact the instructor or department for information.

**Nurs 8180 Doctoral Proseminar I: Scholarly Development**  
S-N only, 1 credit(s);  
**Instructor:** Wyman,Jean Frances  
**Description:** Student may contact the instructor or department for information.

**Nurs 8185 Qualitative Data Analysis for Health Care Research**  
3-4 credit(s), max credits 4, 1 completion allowed;  
**Instructor:** Peden-McAlpine,Cynthia Jeanne  
**Description:** Student may contact the instructor or department for information.

**Nurs 8360 Advanced Clinical Nursing**  
1-6 credit(s), max credits 6, 1 completion allowed;  
**Instructor:** Kaas,Merrie Jean  
**Description:** Student may contact the instructor or department for information.

**Nurs 8361 Special Topics in Nursing**  
2 credit(s), max credits 4, 1 completion allowed;  
**Instructor:** Sieving,Renee Evangeline  
**Description:** Student may contact the instructor or department for information.

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**Nutrition**  
225 Food Science & Nutrition Building

**Nutr 5624 Nutrition and Genetics**
2 credit(s);
Instructor: Trudo, Sabrina Peterson
Description: Student may contact the instructor or department for information.

Nutr 5625 Nutritional Biochemistry
A-F only, 3 credit(s);
Instructor: Chen, Chi
Description: Course Description Nutritional Biochemistry is to provide an overview of biochemical molecules and pathways that are important in the maintenance of healthy homeostasis of human body, with a focus on macronutrient metabolism, for the graduate students in Nutrition, Animal Science and other relevant programs. Course Objectives ---To review the biological system of energy metabolism ---To study the chemical/biochemical properties and metabolic pathways of carbohydrate, lipid and protein. ---To learn the regulatory mechanism of macronutrient metabolism and associated signaling pathways. ---To understand the research techniques used in the basic biochemistry and nutritional biochemistry research. ---To evaluate and criticize the experimental approaches and scientific information presented in the research articles related to nutritional biochemistry. Textbooks and Materials ? Some of course contents are originated from 3 textbooks below: ---Color Atlas of Biochemistry (2nd Edition) by Koolman and Roehm (Thieme, ISBN 1-58890-247-1) ---Harper’s Illustrated Biochemistry (28th Edition) by Murray, Rodwell, Bender and Botham (McGraw Hill Publishers, ISBN: 978-0-07-162591-3) http://www.accessmedicine.com/resourceTOC.aspx?resourceID=18). ---Advanced Nutrition and Human Metabolism (5th Edition) by Gropper, Smith and Groff (Wadsworth Cengage Learning, ISBN-13: 978-0-495-11657-8) ? Handouts, references and reading assignments will be posted at the Moodle site after the lecture.

Nutr 8620 Advances in Nutrition
2 credit(s);
Instructor: Csallany, A Saari
Description: Student may contact the instructor or department for information.

Nutr 8621 Presentation Skills
S-N only, 1 credit(s);
Instructor: Reicks, Marla M
Description: Orientation to nutrition graduate program requirements and procedures, research ethics and available resources. Presenting scientific seminars, using electronic presentation programs/equipment.

Nutr 8695 Independent Study: Nutrition
1-10 credit(s), max credits 30, 3 completions allowed;
Instructor: Cariad-Barrett, Anna
Description: Student may contact the instructor or department for information.

Occupational Therapy 271 Children’s Rehabilitation Center (Box 388 UMHC)

OT 1003 Orientation to Occupational Therapy
S-N only, 1 credit(s);
Instructor: Jacobs, C
Description: This is a fully online section (no face to face classroom sessions) offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently at your own pace in a nine month extended term, beginning the month of registration, with term registrations open each month. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This course is designed to help you decide whether a career in occupational therapy is the right choice for you. In this course, you will learn what occupational therapy is and how occupational therapists use activity as a treatment modality as well as an outcome. The lessons will describe some of the treatment settings and populations with which you might work as an occupational therapist. The course is offered S/N only, assessments of learning include online quizzes for each lesson, several short-answer written assignments, and a comprehensive open-book style written exam. This course is recommended if you wish to apply to the master's program in occupational therapy at the University of Minnesota.
Style: Online
Grading: 54% final exam, 16% quizzes, 30% written homework. S/N
Exam Format: Final take-home essay.

OT 5395 Independent Study in Occupational Therapy
1-4 credit(s), max credits 16, 16 completions allowed;
Instructor: Martin PhD, Peggy Mae
Description: Student may contact the instructor or department for information.
OT 6100 Public and Professional Engagement I
S-N only, 0.5 credit(s), max credits 1;
Instructor: Bourland, Christina H
Description: Student may contact the instructor or department for information.

OT 6101 Foundations of Occupational Science and Occupational Therapy
A-F only, 4 credit(s);
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

OT 6102 Professional Identity: Behaviors and Attitudes
S-N only, 2 credit(s);
Instructor: Stern PhD, Erica Beth
Description: Student may contact the instructor or department for information.

OT 6103 Occupational Therapy Process for Society
A-F only, 3 credit(s);
Instructor: Martin PhD, Peggy Mae
Description: Student may contact the instructor or department for information.

OT 6111 Foundations: Occupations as Therapy
A-F only, 3 credit(s);
Instructor: Hutson, Jennifer Ann
Description: Student may contact the instructor or department for information.

OT 6113 Occupational Therapy Process for Community
A-F only, 3 credit(s);
Instructor: Jones, Terrianne Thielen
Description: Student may contact the instructor or department for information.

OT 6200 Public and Professional Engagement II
S-N only, 0.5 credit(s), max credits 1.5, 3 completions allowed;
Instructor: Bourland, Christina H
Description: Student may contact the instructor or department for information.

OT 6402 Occupational Therapy Process for Individuals: Occupation Through Neurorehabilitative Approaches
A-F only, 4 credit(s);
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

OT 6403 Management of Occupational Therapy Services
A-F only, 1 credit(s);
Instructor: Bourland, Christina H
Description: Student may contact the instructor or department for information.

OT 6412 Occupational Therapy Process for Individuals: Orthotics and Prosthetics
A-F only, 3 credit(s);
Instructor: McGee, Corey Weston
Description: Student may contact the instructor or department for information.

OT 6422 Occupational Therapy Process: Group Context
A-F only, 2 credit(s);
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

OT 6432 Occupational Therapy Process for Individuals: Educational Context
A-F only, 2 credit(s);
Instructor: Sopeth, Laura Jean
Description: Student may contact the instructor or department for information.

OT 7201 Scholarly Inquiry in Health Sciences
A-F only, 4 credit(s);
Instructor: Mathiowetz PhD, Virgil G
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: Mathiowetz PhD, Virgil G
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: Martin PhD, Peggy Mae
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: Jones, Terrianne Thielen
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: McGee, Corey Weston
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: Stern PhD, Erica Beth
Description: Student may contact the instructor or department for information.

OT 7494 Scholarly Project in OT II
S-N only, 4 credit(s);
Instructor: Schreder, Therese M
Description: Student may contact the instructor or department for information.

OT 7596 Occupational Therapy Level II Fieldwork I
S-N only, 6 credit(s);
Instructor: Bourland, Christina H
Description: Student may contact the instructor or department for information.

OT 7696 Occupational Therapy Level II Fieldwork II
S-N only, 6 credit(s);
Instructor: Jones, Terrianne Thielen
Description: Student may contact the instructor or department for information.
OT 7796 Occupational Therapy Level II Fieldwork III: Optional
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Jones, Terrianne Thielen
Description: Student may contact the instructor or department for information.

Off-Campus Study  220 Johnston Hall

OCS 520 Off-Campus Study
S-N only, 0 credit(s);
Instructor: Holliday, David Wallace
Description: Student may contact the instructor or department for information.

OCS 550 National Student Exchange: Off-Campus Study
S-N only, 0 credit(s), 3 completions allowed;
Instructor: STAFF
Description: This course registration allows students to study in a different part of the United States for up to a year through National Student Exchange. There are more than 170 National Student Exchange (NSE) institutions in Hawaii, Florida, and 48 other states and regions, including Puerto Rico, Guam, the Virgin Islands, and Canada. The application deadline for participation in the following academic year is mid-February. Prerequisite: application and acceptance into the National Student Exchange program in the Career and Community Learning Center.

OCS 1550 National Student Exchange: Off-Campus Study
S-N only, 1-15 credit(s), max credits 15, 3 completions allowed;
Instructor: STAFF
Description: This course registration allows students to study in a different part of the United States for up to a year through National Student Exchange. There are more than 170 National Student Exchange (NSE) institutions in Hawaii, Florida, and 48 other states and regions, including Puerto Rico, Guam, the Virgin Islands, and Canada. The application deadline for participation in the following academic year is mid-February. Prerequisite: application and acceptance into the National Student Exchange program in the Career and Community Learning Center.

OCS 3500 Domestic Off-Campus
S-N only, 1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Holliday, David Wallace
Description: Student may contact the instructor or department for information.

Office of Undergraduate Education  220 Morrill Hall

OUE 1086 The First Year Experience
A-F only, 2 credit(s);
Instructor: Jacobs, Walt
Description: OUE 1086 is a 2-credit hour course for student-athletes designed to assist in the transition from high school to higher education. Course topics include academic skills, self-awareness, identity development, self-authorship, and understanding student-community responsibility through diverse perspectives. This course will provide tools to build positive relationships and enhance the overall college experience through addressing challenges associated with the first year experience. OUE 1086 will introduce students to campus and community resources to increase success in both their academic and athletic careers. This course includes lecture and discussion sections to facilitate learning.

OUE 2100 Academic Planning and Exploration
1 credit(s);
Instructor: Anderson, Jeffrey Alan
Description: This web-based, one credit course is for undergraduate students who are undecided with their academic major or planning to apply to competitive undergraduate majors. Through a combination of online course modules and in-person meetings, this course will help undecided and competitive-major students engage in the academic and career decision-making process. Students will develop an Exploratory Action Plan to help them discover and declare a best-fit major that matches their interests, values, and academic skills. Course assignments will be customized to meet the student's needs and will include self-assessment inventories, reflective essays, and an action plan project. This course is offered primarily online but also requires students to attend two in-person meetings with the instructor during the term (in the third and eighth weeks of the course). Prerequisites: Because of the unique nature of this course, students are required to complete a pre-registration survey to determine if this course is a good fit. Priority will go to undecided students who have completed at least 15 academic credits.
Style: 20% Lecture, 80% Web Based.
Grading: 20% special projects, 70% reflection paper, 10% in-class presentation.

OUE 3050 Introduction to Peer Cooperative Learning
S-N only, 1 credit(s);
Instructor: Walters, Matthew
Description: This course introduces students to the field of peer cooperative learning. It will focus on factors enhancing the effectiveness of group learning, including facilitating the learning process, integrating learning skill development and content knowledge acquisition, and application of appropriate educational theories.

Ojibwe 19 Scott Hall

Ojib 1101 Beginning Ojibwe I
5 credit(s); Credit will not be granted if credit has been received for: OJIB 4101;
Instructor: Jones, Dennis
Description: Student may contact the instructor or department for information.

Ojib 3103 Intermediate Ojibwe I
5 credit(s); OJIB 4101, 4102 Credit will not be granted if credit has been received for: OJIB 4103;
Instructor: Jones, Dennis
Description: Student may contact the instructor or department for information.

Ojib 4101 Beginning Ojibwe I
3 credit(s); OJIB 1101 Credit will not be granted if credit has been received for: OJIB 1101;
Instructor: Jones, Dennis
Description: Student may contact the instructor or department for information.

Ojib 4103 Intermediate Ojibwe I
3 credit(s); OJIB 3103 Credit will not be granted if credit has been received for: OJIB 3103;
Instructor: Jones, Dennis
Description: Student may contact the instructor or department for information.

Ojib 5106 Advanced Ojibwe Language I
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Fairbanks, Brendan George
Description: Student may contact the instructor or department for information.

Oral Biology 15-209 MoosT

OBio 5001 Methods in Research and Writing
2 credit(s);
Instructor: Rudney, Joel David
Description: Student may contact the instructor or department for information.

OBio 8026 Salivary Glands and Secretions
A-F only, 2 credit(s);
Instructor: Rudney, Joel David
OBio 8030 Oral Biology Seminar
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Gopalakrishnan, Rajaram
Description: Student may contact the instructor or department for information.

OBio 8093 Tutorial in Oral Biology
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Herzberg, Mark C
Description: Student may contact the instructor or department for information.

OBio 8094 Directed Research
S-N only, 1-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Herzberg, Mark C
Description: Student may contact the instructor or department for information.

Oral and Maxillofacial Surgery 7-174 MoosT

OSur 5257 Ambulatory General Anesthesia for the Oral and Maxillofacial Surgeon
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 5276 Medicine Rotation for the Oral and Maxillofacial Surgeon
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 8250 Oral and Maxillofacial Surgery Rotation for the Oral and Maxillofacial Surgeon
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 8253 Case Presentations and Chief Conferences
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 8255 General Surgery Rotation for the Oral and Maxillofacial Surgeon
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 8256 Contemporary Anesthesia Literature Review
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 8260 Surgical Rounds for the Oral and Maxillofacial Surgeon
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.

OSur 8267 Anesthesia Rotation for the Oral and Maxillofacial Surgeon
S-N only, 0-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hughes, Pamela Jean
Description: Student may contact the instructor or department for information.
OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: O'Leary, Patrick James
Description: PLEASE NOTE DIFFERENCES IN THE FOLLOWING COURSE SECTIONS of OLPD 1301W: SECTION 5 with Patrick O'Leary and Jules Darg is a regular CLASSROOM course and will meet twice weekly on Tuesdays and Thursdays during fall semester. SECTION 12 with Cynthia Digby and Jules Darg is entirely ONLINE. SECTION 15 with Jules Darg is a BLENDED course (half classroom and half online). The seven (7) classroom sessions will meet on Mondays from 4:00 p.m. - 6:30 p.m. on the following dates: 9/10, 9/24, 10/08, 10/22, 11/05, 11/19, and 12/03. All three sections (5, 12, and 15) of this 1xxx-level course introduce leadership through personal perspectives and frameworks where students examine their own and other classmates' views on leadership through a dynamic community of learners. Students will explore the differences between personal and positional leadership, and study characteristics of effective leadership, including leaders at the University of Minnesota and beyond. Students will also learn about leadership through the development of a social betterment project and the importance of personal development. OLPD 1301W also fulfills the 1xxx-level core course requirement for the Leadership Minor.
Style: 50% Lecture, 50% Web Based. This class is entirely online.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Darg, Jules
Description: PLEASE NOTE DIFFERENCES IN THE FOLLOWING COURSE SECTIONS of OLPD 1301W: SECTION 5 with Patrick O'Leary and Jules Darg is a regular CLASSROOM course and will meet twice weekly on Tuesdays and Thursdays during fall semester. SECTION 12 with Cynthia Digby and Jules Darg is entirely ONLINE. SECTION 15 with Jules Darg is a BLENDED course (half classroom and half online). The seven (7) classroom sessions will meet on Mondays from 4:00 p.m. - 6:30 p.m. on the following dates: 9/10, 9/24, 10/08, 10/22, 11/05, 11/19, and 12/03. All three sections (5, 12, and 15) of this 1xxx-level course introduce leadership through personal perspectives and frameworks where students examine their own and other classmates' views on leadership through a dynamic community of learners. Students will explore the differences between personal and positional leadership, and study characteristics of effective leadership, including leaders at the University of Minnesota and beyond. Students will also learn about leadership through the development of a social betterment project and the importance of personal development. OLPD 1301W also fulfills the 1xxx-level core course requirement for the Leadership Minor.
Style: 50% Lecture, 50% Web Based. This class is entirely online.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Marshall, Scott Ethan
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Timm, Jeffrey Scott
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Soria, Krista Marie
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Russell, Katherine Anna
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: McFadden, Colin Hamilton
Description: Student may contact the instructor or department for information.
OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Novack,Lisa Marie
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Marcy, Ben
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Cisneros, Steven M
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Hellstrom, David P
Description: This 1000 level course introduces leadership using a personal leadership perspectives and frameworks. Students taking this course will have the opportunity to examine their own views on leadership, explore the differences between personal and positional leadership, study characteristics of leaders within the University of Minnesota and learn about the importance of personal development.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Skrebes, Robyn Jane
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Long, Brian Richard
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Harris, Margaret McKenny
Description: Student may contact the instructor or department for information.

OLPD 1302 Personal Leadership in the University
A-F only, 3 credit(s);credit will not be granted if credit already received for: EdPA 1302 or EdPA 1301W
Credit will not be granted if credit has been received for: PA 1961W;
Instructor: Anderson, Orkideh M.
Description: This 1000-level course introduces leadership using a personal leadership perspective and framework. Students taking this course will have the opportunity to examine their own views on leadership, examine aspects of identity and difference, learn about the differences between personal and positional leadership, and begin to explore concepts and skills relating to effective leadership and positive change. This course is reserved for BME and HRD majors. Work Load: 15 pages reading per week, 30 pages writing per term, 8 papers, 2 presentations.
Style: 10% Lecture, 80% Discussion, 5% Small Group Activities, 5% Student Presentation.
Grading: 10% reports/papers, 50% special projects, 10% attendance, 15% reflection paper, 15% class participation.

OLPD 1302 Personal Leadership in the University
A-F only, 3 credit(s);credit will not be granted if credit already received for: EdPA 1302 or EdPA 1301W
Credit will not be granted if credit has been received for: PA 1961W;
Instructor: Omari, Abdul Majid
Description: This 1000-level course introduces leadership using a personal leadership perspective and framework. Students taking this course will have the opportunity to examine their own views on leadership, examine aspects of identity and difference, learn about the differences between personal and positional leadership, and begin to explore concepts and skills relating to effective leadership and positive change. This course is reserved for BME and HRD majors. Work Load: 15 pages reading per week, 30 pages writing per term, 8 papers, 2 presentations.
OLPD 2811 Societies of the Future: Changing Work Contexts  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
Instructor: Harkins, Arthur M  
Description: COURSE DESCRIPTION This course provides basic, personalized experiences with the evolution of technology, social contexts and work, with special emphasis on conditions likely to be encountered within the near future. The course repurposes fundamental liberal arts content as effective components of decision-making processes set in short, medium-, and long-range social and work trends and projections. In this course, students and instructors will consider a wide range of technologies, all the way from the basic American highway system to the latest developments in the Cloud. Throughout this consideration, students will be guided in the exploration and analysis of the implications and choices around development, adoption and use of these technologies. Of particular importance is the role of context, control, and ambiguity, and how these each influence our interactions and uses of technologies. Through course readings, in-class discussions, weekly reflection papers, and group projects, over the course of the semester, students will work towards the articulation of a more formal framework for the evaluation of technologies. Such a framework will center around critical questions that we will ask ourselves and each other in class and in writing. We will be looking at technology and particularly the future of technology at work, but through the lens of the questions and queries raised by the liberal arts.  
STATEMENT OF COURSE OBJECTIVES Upon completion of the course, students will be able to: Understand what liberal education is, with a particular focus on technologies of the future and work of the future, and understand what this means for them as students and as citizens; Describe the rapidly evolving social (economic, political, cultural and technological) circumstances within which work changes, and explore the ethical aspects of these possible changes; Connect knowledge and practice when explaining the study of the future as a trans-disciplinary field, a professional field, and a highly customizable intellectual technology; Consider the impact of technology from multiple perspectives that include developers, users/consumers, as well as others in society; Discuss the history of human societies, with particular emphasis upon technological evolution and implications for the world of work. Emphasize the importance of alternative perspectives when considering future social contexts and associated work patterns, and develop skills in constructing a framework for evaluating conflicting views of exiting or emerging technologies; Describe the explosive development of human capital, and the risks of institutional lag; Explain how future-oriented personal development can contribute to improved organizational effectiveness in the face of change; and Discuss the selective personalization of proactive responses to forces shaping human capital developing in the 21st century.

OLPD 2811H Societies of the Future: Changing Work Contexts, Honors  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
Instructor: Harkins, Arthur M  
Description: Student may contact the instructor or department for information.

OLPD 3201 Adult Education Overview  
A-F only, 1 credit(s);  
Instructor: El-radi, Reem D  
Description: This online course represents an overview of the theory and practice of adult learning and adult development, which, together, comprise the field of Adult Education (AdEd). This course is intended for undergraduates, primarily those who are in the undergraduate HRD degree program and want an AdEd Certificate, as these two programs are integrated. Other undergrads who would like the AdEd Certificate may also use this course to complete the requirements.

OLPD 3202 Introduction to Strategies for Teaching Adults  
A-F only, 3 credit(s);  
Instructor: Park, Rosemarie J  
Description: Best practice theories and practices of adult teaching and learning are the focus of this course. This course covers a variety of teaching and learning perspectives, learner and instructor styles, methods that align with the perspectives of teaching, applications of teaching in diverse settings, a site visit (student choice) to assess best practices when teaching adults, a micro-teaching (group or alone), and learners crafting a teaching philosophy. By the end of AdEd 3101 learners will be able to: - Create a comprehensive glossary for relevant course terms, theorists, and MN organizations focused on teaching or training adults. - Identify and compare teaching and learning strategies and distinguish best practice strategies for the perspectives. - Identify why you and other adults resist learning, and, recommend best practice strategies for addressing learning resistance. - Identify best practice suggestions for teaching in diverse settings, and apply these to modify international training games to reflect best practice suggestions. - Describe possible ethical issues with teaching and learning. - Assess and present on dominant teaching and learning perspectives and practices used during your site visit observation, and, recommend course design and delivery improvements for site visit instructor(s). - Apply best practice suggestions from the course to design and deliver 15 minutes of face-to-face, blended, or online instruction on topic of choice. - Formulate your teaching philosophy and best practice preferences for teaching others.  
Style: 10% Lecture, 10% Film/Video, 40% Discussion, 10% Small Group Activities, 20% Student Presentation, 10% Field Trips. This course is taught half in-class and half online.  
Grading: 66% - Weekly Assignments, Discussion Postings and Class Participation (attendance) 11% - Teaching and Learning Case Study 11% - Micro Teaching Assignment (assignment + group evaluation) 12% - Ethics and Teaching Philosophy
OLPD 3202 Introduction to Strategies for Teaching Adults
A-F only, 3 credit(s);
Instructor: Digby PhD,Cynthia LB
Description: Best practice theories and practices of adult teaching and learning are the focus of this course. This course covers a variety of teaching and learning perspectives, learner and instructor styles, methods that align with the perspectives of teaching, applications of teaching in diverse settings, a site visit (student choice) to assess best practices when teaching adults, a micro-teaching (group or alone), and learners crafting a teaching philosophy. By the end of AdEd 3101 learners will be able to: - Create a comprehensive glossary for relevant course terms, theorists, and MN organizations focused on teaching or training adults. - Identify and compare teaching and learning strategies and distinguish best practice strategies for the perspectives. - Identify why you and other adults resist learning, and, recommend best practice strategies for addressing learning resistance. - Identify best practice suggestions for teaching in diverse settings, and apply these to modify international training games to reflect best practice suggestions. - Describe possible ethical issues with teaching and learning. - Assess and present on dominant teaching and learning perspectives and practices used during your site visit observation, and, recommend course design and delivery improvements for site visit instructor(s). - Apply best practice suggestions from the course to design and deliver 15 minutes of face-to-face, blended, or online instruction on topic of choice. - Formulate your teaching philosophy and best practice preferences for teaching others.
Style: 10% Lecture, 10% Film/Video, 40% Discussion, 10% Small Group Activities, 20% Student Presentation, 10% Field Trips. This course is taught half in-class and half online.
Grading: 66% - Weekly Assignments, Discussion Postings and Class Participation (attendance) 11% - Teaching and Learning Case Study 11% - Micro Teaching Assignment (assignment + group evaluation) 12% - Ethics and Teaching Philosophy

OLPD 3302 Leadership, You, and Your Community
A-F only, 3 credit(s);[1301W or 1302 or PA 1961W or CFAN 1101 or CFAN 3480], grade of at least C credit will not be granted if credit already received for: EdPA 3302Credit will not be granted if credit has been received for: PA 3961;
Instructor: Nicholas,Michael Lee
Description: Student may contact the instructor or department for information.

OLPD 3302 Leadership, You, and Your Community
A-F only, 3 credit(s);[1301W or 1302 or PA 1961W or CFAN 1101 or CFAN 3480], grade of at least C credit will not be granted if credit already received for: EdPA 3302Credit will not be granted if credit has been received for: PA 3961;
Instructor: Ve Lure Roholt,Christine Elizabeth
Description: This course will examine leadership and leadership capacities within the context of social change and public work. Students taking this class will have the opportunity to examine their own views of leadership and social change, learn about leadership theory and core concepts of Public Achievement, and apply knowledge to practice utilizing the Public Achievement model. Particular attention is given to group leadership and the effectiveness of groups and organizations accomplishing change. There are a few aspects to the content of this course which make it unique when compared to traditional collegiate and leadership instruction: As a method of examining leadership capacities within a social change movement, this class will utilize the history, current status, and stories about the issue of poverty as a context. As the theme for the course, many portions of the class content and discussion will explore the issue of poverty. This method is meant as an example of public leadership happening within the intricacies of a social movement and issue. Another major content component of this course is the Public Achievement model. A little less than half of the assigned class days will be dedicated to working within smaller groups (encompassing about 1/3 of the class in each) on a Public Achievement project. For these projects, each of the instructors, in addition to a teaching assistant, will be assigned as a coach for one Public Achievement group. More information about Public Achievement is available in the subsequent pages of this syllabus.
Style: 10% Lecture, 5% Film/Video, 40% Discussion, 10% Small Group Activities, 20% Student Presentation, 10% Field Trips. This course is taught half in-class and half online.
Grading: 20% final exam, 20% reports/papers, 5% quizzes, 5% attendance, 10% journal, 35% in-class presentation, 5% class participation.
Exam Format: Final exam is a take-home written essay.

OLPD 3302 Leadership, You, and Your Community
A-F only, 3 credit(s);[1301W or 1302 or PA 1961W or CFAN 1101 or CFAN 3480], grade of at least C credit will not be granted if credit already received for: EdPA 3302Credit will not be granted if credit has been received for: PA 3961;
Instructor: Asmundson,Aaron R
Description: Leadership and leadership capacities from multicultural/multidimensional perspectives. Students examine their own views on leadership. Leadership theory/practice, group dynamics/behavior, applying knowledge.

OLPD 3305 Learning About Leadership Through Film and Literature
3 credit(s);
Instructor: Snyder,Lynn M.
Description: "Uneasy lies the head that wears a crown" (Shakespeare, Henry IV, Part 2) Being a leader; whether a king, a school principal, or the chair of a student committee creates opportunities and dilemmas for individuals. Being a follower in any organized setting also poses issues for individuals a groups that seek to have an impact on their settings. As with many other subjects, the topic of leadership can be approached in many ways. This class will combine readings from leadership studies, literature, and film to examine a number of specific issues related to leadership and followership, including: ethical dilemmas, different styles of leadership and their consequences, the intersection of public and private in the course of exercising leadership, and the competing loyalties and pressures felt by leaders and followers. In addition, we will address fundamental questions about the nature and desirability of leadership.

Style: 20% Lecture, 20% Film/Video, 20% Discussion, 20% Small Group Activities, 10% Guest Speakers, 10% Web Based.

Grading: 50% reflection paper, 10% in-class presentation, 40% class participation.

OLPD 3306 Leadership Minor: Field Experience
A-F only, 3 credit(s); 3302 with grade of at least C credit will not be granted if credit already received for: EdPA 3402
Credit will not be granted if credit has been received for: PA 3971;
Instructor: Ve Lure Roholt, Christine Elizabeth
Description: Student may contact the instructor or department for information.

OLPD 3306 Leadership Minor: Field Experience
A-F only, 3 credit(s); 3302 with grade of at least C credit will not be granted if credit already received for: EdPA 3402
Credit will not be granted if credit has been received for: PA 3971;
Instructor: Frazzini, Ronald Michael
Description: Student may contact the instructor or department for information.

OLPD 3306 Leadership Minor: Field Experience
A-F only, 3 credit(s); 3302 with grade of at least C credit will not be granted if credit already received for: EdPA 3402
Credit will not be granted if credit has been received for: PA 3971;
Instructor: Nobbe, June Elly
Description: Student may contact the instructor or department for information.

OLPD 3310 Special Topics for Undergraduates
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: STAFF
Description: Inquiry into educational policy and administration problems and issues. No special topic has yet been approved for Fall 2000.

OLPD 3318 Introduction to Project Management
3 credit(s);
Instructor: Plachecki, Frank John
Description: Student may contact the instructor or department for information.

OLPD 3380 Developing Intercultural Competence
A-F only, 3 credit(s);
Instructor: Brunner, C Cryss
Description: Student may contact the instructor or department for information.

OLPD 3401 Teaching Marketing Promotion
A-F only, 3 credit(s);
Instructor: Plachecki, Frank John
Description: Student may contact the instructor or department for information.

OLPD 3424 Sales Training
A-F only, 3 credit(s);
Instructor: Gaddey Jr, Roy Arthur
Description: The class will provide an introduction to the skills and characteristics needed to be successful in sales. The course will cover: * Developing a Personal Selling Philosophy * Developing a Relationship Strategy * Developing a Product Strategy * Developing a Customer Strategy * Developing a Presentation Strategy * Management of Self

OLPD 3461 Professional Sales Management
A-F only, 3 credit(s);
Instructor: Mueller, Wayne G
Description: Student may contact the instructor or department for information.

OLPD 3493 Directed Study: Business and Industry Education
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Plachecki, Frank John
Description: Student may contact the instructor or department for information.

OLPD 3601 Introduction to Human Resource Development
A-F only, 3 credit(s);
Instructor: Quast, Louis Neumann
Description: This course provides an introduction to Human Resource Development (HRD) theories, principles, concepts, and practices. CLASS STRUCTURE: Class sessions include lectures, small and large discussion groups, and audio-visual materials. During class we will strive to clarify, supplement, and analyze text materials. We will learn much more from each other's opinions, knowledge and experience, and active participation is a required part of this course. You will have a variety of sources, including assigned readings and other materials presented in class. COURSE OUTCOMES Upon completion of the course, students will be able to: 1) Describe the economic, psychological, cultural, and technological forces within which HRD functions; 2) Explain HRD as a discipline, a professional field of practice, and its history; 3) Discuss the theory and philosophy of HRD; 4) Contrast the alternative perspectives within HRD; 5) Describe the development of human expertise through personnel training and development; 6) Explain how organization development contributes to improved organizational effectiveness in the face of change, and; 7) Discuss the forces shaping human resource development in the 21st century (e.g., career development, strategic roles, accountability, globalization, and technology).

OLPD 3620 Introduction to Training and Development
A-F only, 3 credit(s);
Instructor: Novillo, Walter E.
Description: Student may contact the instructor or department for information.

OLPD 3620 Introduction to Training and Development
A-F only, 3 credit(s);
Instructor: Hwang, Seog Joo
Description: Student may contact the instructor or department for information.

OLPD 3640 Introduction to Organization Development
A-F only, 3 credit(s);
Instructor: Christesen, David Allen
Description: Student may contact the instructor or department for information.

OLPD 3640 Introduction to Organization Development
A-F only, 3 credit(s);
Instructor: De Georgeo, Michael R
Description: Student may contact the instructor or department for information.

OLPD 3696 Profession and Practice of Human Resource Development
A-F only, 2 credit(s);
Instructor: Stuart, Jonathan David
Description: Student may contact the instructor or department for information.

OLPD 4303W Leadership for Global Citizenship
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Werner, Linnette
Description: Student may contact the instructor or department for information.

OLPD 4303W Leadership for Global Citizenship
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Asmundson, Aaron R
Description: Student may contact the instructor or department for information.
OLPD 4401 E-Marketing
A-F only, 3 credit(s);
Instructor: Novak, Ryan P
Description: Student may contact the instructor or department for information.

OLPD 4420 Practicum in Nonprofit Organizations
A-F only, 2 credit(s), max credits 4;
Instructor: Gaddey Jr, Roy Arthur
Description: Student may contact the instructor or department for information.

OLPD 4426 Strategic Customer Relationship Management
A-F only, 3 credit(s);
Instructor: Selander, Julie Ann
Description: Student may contact the instructor or department for information.

OLPD 4426 Strategic Customer Relationship Management
A-F only, 3 credit(s);
Instructor: Yawson, Robert Mayfield
Description: Student may contact the instructor or department for information.

OLPD 4496 Internship: Business and Marketing Education
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Snyder, Lynn M.
Description: Student may contact the instructor or department for information.

OLPD 4627 Management and Supervisory Training and Development
A-F only, 3 credit(s);
Instructor: Yawson, Robert Mayfield
Description: Student may contact the instructor or department for information.

OLPD 4696 Internship: Human Resource Development
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Snyder, Lynn M.
Description: Student may contact the instructor or department for information.

OLPD 5041 Sociology of Education
3 credit(s); credit will not be granted if credit already received for: EdPA 5041; Credit will not be granted if credit has been received for: SOC 5455;
Instructor: Seashore, Karen Rose
Description: Structures and processes within educational institutions; linkages between educational organizations and their social contexts, particularly related to educational change. Focus on issues of race, class and equity, both within the U.S. and internationally.
Style: 40% Lecture, 40% Discussion. Student presentations, role plays, movie clips, etc.
Grading: 50% reports/papers, 10% in-class presentation, 30% class participation, 10% other evaluation. on-line discussions

OLPD 5041 Sociology of Education
3 credit(s); credit will not be granted if credit already received for: EdPA 5041; Credit will not be granted if credit has been received for: SOC 5455;
Instructor: Gordon, Molly Flynn
Description: Structures and processes within educational institutions; linkages between educational organizations and their social contexts, particularly related to educational change. Focus on issues of race, class and equity, both within the U.S. and internationally.
Style: 40% Lecture, 40% Discussion. Student presentations, role plays, movie clips, etc.
Grading: 50% reports/papers, 10% in-class presentation, 30% class participation, 10% other evaluation. on-line discussions

OLPD 5048 Cross-Cultural Perspectives on Leadership
3 credit(s);
Instructor: Quast, Louis Neumann
Description: This course is designed for students who wish to develop a comprehensive understanding of leadership and culture. To
achieve this goal, the course will use concepts drawn from several academic disciplines and cultural contexts. Students will be expected to integrate these concepts and learn how to translate them from theory to practice. As a result of taking this course, participants will be able to: 1) Define and explain key culture and leadership theories, and current themes in emerging theories. 2) Demonstrate deeper expertise in one leadership theory through leading a 30 minute group presentation and discussion. 3) Synthesize academic, professional, and life experience in a reflective essay regarding personal cultural and leadership influences, using selected models from the course. 4) Demonstrate deeper expertise in one culture and/or leadership theory through completing a critical review of one book selected from the course bibliography. 5) Investigate the cross-cultural leadership experiences of one leader by conducting an interview, analyzing your findings, and documenting your findings and conclusions in a written report. 6) Contribute actively in group discussions of culture and leadership issues. 7) Develop interpersonal communication skills essential to effective cross-cultural leadership through multiple group assignments and activities. 8) Integrate and synthesize your learning about cross-cultural leadership through completing a final case analysis project. This is a course in both cross-cultural and comparative leadership, using examples from diverse cultural and international contexts. The course is being co-taught by two individuals: Professor Gerald Fry, who has extensive leadership experience in the Asia-Pacific region; and Professor Louis Quast, Associate Chair, OLPD, Holder of an Endowed Chair in Leadership with over two decades of leadership consulting experience with diverse organizations.

OLPD 5056 Case Studies for Policy Research
A-F only, 3 credit(s);
Instructor: Stout PhD,Karen Evans
Description: Student may contact the instructor or department for information.

OLPD 5056 Case Studies for Policy Research
A-F only, 3 credit(s);
Instructor: Asmussen,John G
Description: Student may contact the instructor or department for information.

OLPD 5080 Special Topics: Educational Policy and Administration: Gender, Education & International Development
3 credit(s), max credits 24, 24 completions allowed;
Instructor: Shirazi,Roozbeh
Description: Student may contact the instructor or department for information.

OLPD 5087 Seminar: Educational Policy and Administration
1-3 credit(s), max credits 24, 24 completions allowed;
Instructor: STAFF
Description: Shared responsibility of students/instructor in presentation of topics.

OLPD 5095 Problems: Educational Policy and Administration
1-3 credit(s), max credits 24, 24 completions allowed;
Instructor: STAFF
Description: Course or independent study on specific topic within department program emphasis.

OLPD 5096 Internship: Educational Policy and Administration
1-9 credit(s), max credits 24, 24 completions allowed;
Instructor: STAFF
Description: Internship in elementary, secondary, general, or postsecondary administration, or other approved field-related setting.

OLPD 5103 Comparative Education
3 credit(s);
Instructor: Fry,Gerald Walton
Description: This is one of my favorite classes because comparative education has been an integral part of my adult and professional life, starting with my study abroad in Germany. Also I find it extremely fascinating and valuable to compare and contrast education in various countries of the world and to look at different ways of thinking about education and schooling. We will examine, for example, both Buddhist epistemology and that of the Brazilian intellectual, Paulo Freire. There is so much that we can learn from each other. The course will have both a thematic (key critical educational issues such as teaching quality, gender equality, and cultural democracy) and country focus (case studies of Cuba, Tanzania, Laos, e.g.). There will be several guest speakers. There will be two texts for the class: 1) Joseph Tobin's fascinating book: Preschool in Three Cultures Revisited: China, Japan, and the United States. and 2) Comparative and International Education: Issues for Teachers. Other readings will be electronic available through an interactive Moodle site. There are no examinations and the emphasis is instead on the development of critical, comparative, and creative thinking. There is also an emphasis on cooperative learning. The final project, thus, will be a two person one in which you and a classmate compare and contrast two educational systems and present your findings in class (e.g, Egypt and Australia or Vietnam and Germany). The class is highly
interdisciplinary and inherently international/intercultural. Graduate students are welcome from all disciplines and fields of study. Advanced undergraduates in fields such as Global Studies or area studies are also welcome.

**OLPD 5104 Strategies for International Development of Education Systems**

A-F only, 3 credit(s);
Instructor: Johnstone, Christopher J

Description: This course will provide students with an introduction and grounding in key concepts, issues and related to international development in the field of education. Each course unit examines the current research on policy and programmatic interventions that are used to address the key concerns of education: access, equity, quality and efficiency. This course is not designed as advocacy for any particular approach, but as an overview of strategies that have been tried, an assessment of the outcomes, an analysis of the problems and issues that emerged along the way, and a critique of the research used to arrive at conclusions. The goal of this course is for students to learn about and undertake analysis of promising strategies for improving the quality and efficiency of schooling in the developing world. Finally, these strategies are discussed in the political and cultural context in which consultants and international agencies operate.

**Style:** 20% Lecture, 10% Film/Video, 15% Discussion, 20% Small Group Activities, 15% Student Presentation, 5% Field Trips, 5% Guest Speakers, 10% Web Based.

**OLPD 5132 Intercultural Education and Training: Theory and Application**

3 credit(s);
Instructor: Goh PhD, Michael P.

Description: Student may contact the instructor or department for information.

**OLPD 5201 Strategies for Teaching Adults**

A-F only, 3 credit(s);
Instructor: Park, Rosemarie J

Description: Student may contact the instructor or department for information.

**OLPD 5202 Perspectives of Adult Learning and Development**

3 credit(s);
Instructor: Twohig, Catherine Carol

Description: Student may contact the instructor or department for information.

**OLPD 5211 Introduction to the Undereducated Adult**

A-F only, 1 credit(s);
Instructor: Digby PhD, Cynthia LB

Description: OLPD 5211: This course focuses on issues of adult literacy, and best practices when teaching adult basic education, and/or adult English Language Learners in the workplace or in your community. We will briefly consider: who the undereducated adults are in our society, what literacy means, what the statistics indicate about poverty and education, what the statistics indicate about lower levels of literacy and the work prospects for adults who have lower levels of literacy, adult basic education and adult English Language Learning options in Minnesota, and best practices when teaching adult basic education and adult English Language Learning.

**Style:** 100% Web Based.

**Grading:** 75% - Weekly Assignments, Discussion Postings and Responses to others, and Wiki Assignment Posting and Editing 25% - Final/Site Visit Assignment

**OLPD 5212 Introduction to Adult Literacy in the Workplace**

A-F only, 1 credit(s);
Instructor: Mortrude, Judy Ann

Description: Student may contact the instructor or department for information.

**OLPD 5213 Introduction to Adult Literacy in the Community**

A-F only, 1 credit(s);
Instructor: El-radi, Reem D

Description: Student may contact the instructor or department for information.

**OLPD 5226 Advanced Assessment of Adult Literacy**

A-F only, 1 credit(s);
Instructor: Digby PhD, Cynthia LB
OLPD 5302 Educational Policy: Context, Inquiry, and Issues
3 credit(s);
Instructor: STAFF
Description: Review of social science concepts/research in considering educational policies/issues; process of inquiry that affect policy development, implementation, evaluation. Focus on preK-12. Role of educational leaders, administrators.

OLPD 5322 Leaders in the Superintendency and Central Office
3 credit(s);
Instructor: Brunner, C Cryss
Description: Role and responsibility of the superintendent in school district. Emphasizes real life experiences, leadership potential as (CEO). Purposes, power, politics, and practices of position. Interplay of internal school forces, external community forces analyzed in multiple contexts. Manifestations of leadership in public, high-profile appointment.

OLPD 5344 School Law
3 credit(s);
Instructor: Forbes, Paula Gail
Description: Student may contact the instructor or department for information.

OLPD 5346 Politics of Education
A-F only, 3 credit(s);
Instructor: Alexander, Nicola
Description: Political dimensions of policy formulation/implementation in education. Use of power/influence in shaping educational policies and in resolving conflicts over educational issues. Analysis of consequences/cross-impacts.

OLPD 5361 Project in Teacher Leadership
S-N only, 3 credit(s), max credits 6, 1 completion allowed; MEd student in Teacher Leadership Program credit will not be granted if credit already received for: EdPA 5361 Credit will not be granted if credit has been received for: CI 5178;
Instructor: Magnusson PhD, Deanne L.
Description: Student may contact the instructor or department for information.

OLPD 5374 Leadership for Professional Development
4 credit(s);
Instructor: York-Barr, Jennifer
Description: Designing, implementing, evaluating staff development in PK-12 settings. Research-based standards for effective staff development. Need for embedded time for collaborative learning, evaluating staff/student outcomes.

OLPD 5385 Licensure Seminar: Program Policies and Inclusionary Leadership
S-N only, 1 credit(s);
Instructor: Taipale, Lyle Eugene
Description: Student may contact the instructor or department for information.

OLPD 5386 Leadership Portfolio Seminar
S-N only, 1 credit(s);
Instructor: Latimer, Sally
Description: Student may contact the instructor or department for information.

OLPD 5391 Special Education Law for Leaders
1 credit(s);
Instructor: Law, David W
Description: Student may contact the instructor or department for information.
OLPD 5396 Field Experience in PK-12 Administration: Authentic Practice in Leadership
S-N only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Scearcy, Lynn R
Description: Field experience or internship arranged for students seeking licensure as PK-12 principal/superintendent. Content/credit depend on licensure requirements specified in individual field experience agreement.

OLPD 5396 Field Experience in PK-12 Administration: Authentic Practice in Leadership
S-N only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Nickerson, Jr., Neal C.
Description: Field experience or internship arranged for students seeking licensure as PK-12 principal/superintendent. Content/credit depend on licensure requirements specified in individual field experience agreement.

OLPD 5476 Field Based Projects in Business and Industry
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Stertz EdD, Tom
Description: Student may contact the instructor or department for information.

OLPD 5501 Principles and Methods of Evaluation
3 credit(s); credit will not be granted if credit already received for: EdPA 5501 Credit will not be granted if credit has been received for: EPSY 5243;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

OLPD 5502 Theory and Models of Evaluation
3 credit(s);
Instructor: King, Jean A.
Description: Student may contact the instructor or department for information.

OLPD 5521 Cost and Economic Analysis in Educational Evaluation
3 credit(s);
Instructor: STAFF
Description: Use and application of cost-effectiveness, cost-benefit, cost-utility, and cost-feasibility in evaluation of educational problems and programs.

OLPD 5524 Evaluation Colloquium
S-N only, 1 credit(s), max credits 24, 24 completions allowed; [5501 or EDPA], [5501 or EPSY 5243] credit will not be granted if credit already received for: EdPA 5524 Credit will not be granted if credit has been received for: EPSY 5246;
Instructor: STAFF
Description: Informal seminar of faculty and advanced students interested in the issues and problems of program evaluation.

OLPD 5528 Focus Group Interviewing Research Methods
3 credit(s);
Instructor: Krueger, Richard A
Description: Students will develop skills needed to conduct focus group interviews which involve learning and practicing techniques that result in successful focus groups. Students will be expected to conduct a focus group study and report results for the final class session. Attention is placed on using focus groups in interpretative environments suitable for academic research, or as mixed-method applied research in areas such as health, medical, educational, governmental and non-profit environments.

OLPD 5601 Foundations of Human Resource Development
1 credit(s);
Instructor: Wohkittel, Joseph Max
Description: Student may contact the instructor or department for information.

OLPD 5605 Strategic Planning through Human Resources
A-F only, 3 credit(s);
Instructor: Peterson, Shari L
Description: This course explores the strategic nature of organizations and how HRD can achieve their goals which must be aligned
with those of the organization. Strategic planning is viewed holistically and framed within the context of systems thinking. The focus is on identifying ways that HRD senior managers can become strategic and maintain that status so as to be recognized as a strategic player in the organization. Course Objectives During this course, students will have an opportunity, through participation in discussion and through individual and group activity to engage in critical thinking in order to: 1. Identify and describe the strategic role of human resource development. 2. Identify objectives and strategies for getting HRD to the strategic planning table. 3. Understand the business goals of an organization and how HRD initiatives contribute to achieving those goals. 4. Explain the relationship between organizational core competencies and competitive advantage, and how these constructs are related to HRD initiatives. 5. Analyze organizational missions and identify relevant HRD contributions. 6. Identify strategies for achieving high-level performance from human resources. 7. Understand the strategic nature of financial accountability for HRD. 8. Enhance writing and critical thinking skills.

OLPD 5607 Organization Development
A-F only, 3 credit(s);
Instructor: Christesen, David Allen
Description: This course provides an overview of organization development theories and practices. Organizational Development (OD) is a conscious, planned process of developing an organization's capabilities so that it can attain and sustain an optimum level of performance as measured by efficiency, effectiveness, and health. Through the process of OD, we attempt to bring about successful change efforts in individual employees, groups and teams, inter-groups, and organizations. At any of these levels of analysis, when we use the process of OD we are essentially asking: -Where are we? -Where do we want to be? -How do we get from where we are to where we want to be? To achieve a competitive advantage globally, contemporary organizations are in a continuous state of change. Within such a complex system as an organization, change has a rippling effect. For instance, technological innovation is not limited to hardware and software. It has an impact, sometimes quite dramatic, economically, politically, socially, legally, organizationally, and even personally. Given the magnitude of change taking place at the beginning of the 21st century, it is important for HR, OB, and Evaluation professionals to examine the theories and models, and methods and processes related to organizational change. In this course, we will focus on those methods, interventions, models, and processes specifically related to diagnosing and planning for organizational change.

OLPD 5611 Facilitation and Meeting Skills
1 credit(s);
Instructor: Sandstrom, Krista Lynn
Description: Student may contact the instructor or department for information.

OLPD 5619 Planning and Decision-Making Skills
1 credit(s);
Instructor: Sandstrom, Krista Lynn
Description: Student may contact the instructor or department for information.

OLPD 5696 Internship: Human Resource Development
S-N only, 1-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Peterson, Shari L
Description: Student may contact the instructor or department for information.

OLPD 5701 U.S. Higher Education
3 credit(s);
Instructor: Hendel, Darwin Dale
Description: This course is an introductory survey of U.S. higher education. It addresses both the historical development of, and contemporary issues in, higher education in the United States. The content of the course is organized around the higher education topics in historical and contemporary contexts simultaneously. The outcomes sought for students taking the course include the following: - Basic knowledge of the system of higher education in the United States; - Understanding of historical events, including the political, psychological and economic factors that shaped higher education and continues to affect institutions today; - Sufficient background for subsequent in-depth study in the field of higher education in the United States in the context of changes in higher education across the world; and - A critical perspective on the higher education literature.
Style: 30% Lecture, 8% Film/Video, 13% Discussion, 15% Small Group Activities, 8% Student Presentation, 3% Field Trips, 8% Guest Speakers, 15% Web Based.
Grading: 60% reports/papers, 10% journal, 5% reflection paper, 10% in-class presentation, 15% class participation.

OLPD 5701 U.S. Higher Education
3 credit(s);
Instructor: Gupton, Jarrett Temple
Description: This course is an introductory survey of U.S. higher education. It addresses both the historical development of, and
contemporary issues in higher education in the United States. The content of the course is organized around the higher education topics in historical and contemporary contexts simultaneously. The outcomes sought for students taking the course include the following: - Basic knowledge of the system of higher education in the United States; - Understanding of historical events, including the political, psychological and economic factors that shaped higher education and continues to affect institutions today; - Sufficient background for subsequent in-depth study in the field of higher education in the United States in the context of changes in higher education across the world; and - A critical perspective on the higher education literature.

Style: 30% Lecture, 8% Film/Video, 13% Discussion, 15% Small Group Activities, 8% Student Presentation, 3% Field Trips, 8% Guest Speakers, 15% Web Based.
Grading: 60% reports/papers, 10% journal, 5% reflection paper, 10% in-class presentation, 15% class participation.

OLPD 5721 Race and Ethnicity in Higher Education
3 credit(s);
Instructor: Gupton, Jarrett Temple
Description: Student may contact the instructor or department for information.

OLPD 5801 Survey: Human Resource Development and Adult Education
3 credit(s);
Instructor: Twohig, Catherine Carol
Description: Student may contact the instructor or department for information.

OLPD 5816 Distance Learning in Adult Education and Training
A-F only, 3 credit(s);
Instructor: Woldeab, Daniel
Description: This Internet-based course, Distance Learning in Adult Education and Training, is a course of study in the practice and philosophy of distance education. While this course is about distance education in general, special attention will be given to Internet-based media. This course is appropriate for students who anticipate roles in delivering training using distance education or teaching using distance education. Students will have the opportunity to begin planning an online course or training system. This course will teach a learner-centered, interaction-driven philosophy and practice of distance education.

OLPD 5893 Directed Study in WHRE
1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Twohig, Catherine Carol
Description: Student may contact the instructor or department for information.

OLPD 5893 Directed Study in WHRE
1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Stertz EdD, Tom
Description: Student may contact the instructor or department for information.

OLPD 8002 Critical Issues in Contemporary Education
3 credit(s);
Instructor: Magnusson PhD, Deanne L.
Description: Student may contact the instructor or department for information.

OLPD 8011 Doctoral Research Seminar I
S-N only, 1 credit(s);
Instructor: Ropers-Huilman, Rebecca
Description: Student may contact the instructor or department for information.

OLPD 8016 Research Design and Educational Policy
3 credit(s), max credits 6;
Instructor: Yeh, Stuart S
Description: Student may contact the instructor or department for information.

OLPD 8087 Seminar: Educational Policy and Administration
1-3 credit(s), max credits 24, 24 completions allowed;
Instructor: Chapman, David W
Description: Student may contact the instructor or department for information.
OLPD 8095 Problems: Educational Policy and Administration
1 credit(s), max credits 24, 24 completions allowed;
Instructor: Goh PhD, Michael P.
Description: Student may contact the instructor or department for information.

OLPD 8121 Doctoral Seminar: Comparative and International Development Education
S-N only, 1-6 credit(s), max credits 6, 4 completions allowed;
Instructor: Magnusson PhD, Deanne L.
Description: Student may contact the instructor or department for information.

OLPD 8121 Doctoral Seminar: Comparative and International Development Education
S-N only, 1-6 credit(s), max credits 6, 4 completions allowed;
Instructor: Fry, Gerald Walton
Description: Student may contact the instructor or department for information.

OLPD 8302 Educational Policy Perspectives
3 credit(s);
Instructor: Alexander, Nicola
Description: EdPA 8302 is a required course in the PhD graduate program of Educational Administration. It focuses on the principles of policy analysis and introduces students to the techniques used systematically to analyze and resolve policy issues in the education arena. The focus is on ex ante policy analysis, so the starting point will be defining a problem. The rudimentary principles of policy analysis are reviewed, but we will also spend much of the time critiquing the literature in the field and applying the principles learned. The course aims to develop an understanding of the underlying structure of policy problems and to provide students with the appropriate guidelines of how sound analyses may be made. By the end of the course we will cover: major ethical worldviews that underlie policy formulation and analyses; policy analysis as problem solving and method; fundamental principles of policy analysis; components of a well-formulated policy argument; key steps underlying the policy analysis process; techniques used to conduct policy analysis; critical issues in educational administration for all program areas (Comparative and international education; educational administration (K-12); evaluation; and higher education).

OLPD 8595 Evaluation Problems
1-6 credit(s), max credits 24, 24 completions allowed; [5501 or EDPA 5501 or EPSY 5243], instr consent credit will not be granted if credit already received for: EdPA 8595 Credit will not be granted if credit has been received for: EPSY 8295;
Instructor: King, Jean A.
Description: Student may contact the instructor or department for information.

OLPD 8596 Evaluation Internship
1-9 credit(s), max credits 24, 24 completions allowed;
Instructor: King, Jean A.
Description: Student may contact the instructor or department for information.

OLPD 8596 Evaluation Internship
1-9 credit(s), max credits 24, 24 completions allowed;
Instructor: Pejsa, Laura J
Description: Student may contact the instructor or department for information.

OLPD 8703 Public Policy in Higher Education
A-F only, 3 credit(s);
Instructor: Asmussen, John G
Description: Student may contact the instructor or department for information.

OLPD 8801 Advanced Theory in Human Resource Development and Adult Education
A-F only, 3 credit(s);
Instructor: Ardichvili, Alexandre A
Description: Critical assessment and development of human resource development (HRD) and adult education (AE) theories and discussion of the role of theory in addressing practical demands placed upon individuals and organizations. COURSE OBJECTIVES: By the end of this course students will be able to: 1. Develop an understanding of the philosophical foundations of theory and theory development; 2. Familiarize themselves with the current approaches to social science research and theory-building; 3. Examine different perspectives of research and theory-building; 4. Develop critical thinking skills necessary to understand, interpret, and
evaluate research and theory in human resource development and adult education; 5. Identify, compare and critique some current theories and theory-building methodologies; 6. Construct a HRD or AE theory (or conceptual framework) in a particular area of professional interest; 7. Critically review the literature of theory and research in a particular area of study; 8. Become part of a community of scholars and contribute to the viability and productivity of this community; 9. Recognize personal barriers to effective academic writing, and develop a strategy for overcoming these barriers.

METHODS OF INSTRUCTION: The course will primarily utilize seminars, scholarly dialogue, and written assignments. The instructor's main role is to facilitate learning, lead discussions, and share knowledge and resources. NOTE: This course is required for all doctoral students in HRD, Adult Education, and WHRE tracks. Doctoral students from other programs should talk to the instructor prior to signing up for this course to determine whether there is a fit between the course content and the focus of their doctoral studies.

OLPD 8812 Quantitative Research in Education
3 credit(s);
Instructor: Anderson, Melissa S.
Description: Student may contact the instructor or department for information.

OLPD 8815 Ethics and Responsible Research
A-F only, 1 credit(s);
Instructor: Brown PhD, James M
Description: Student may contact the instructor or department for information.

OLPD 8841 Foundations of Work and Human Resource Education
3 credit(s);
Instructor: Peterson, Shari L
Description: Student may contact the instructor or department for information.

OLPD 8890 Research Seminar
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Brown PhD, James M
Description: Student may contact the instructor or department for information.

Orthodontics 15-209 MoosT

Otho 7102 Growth & Development
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Beyer, John Paul
Description: Student may contact the instructor or department for information.

Otho 7112 Diagnosis & Treatment Planning
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Vayda, Patricia Macchiaru
Description: Student may contact the instructor or department for information.

Otho 7202 Clinical Orthodontics
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Speidel, T Michael
Description: Student may contact the instructor or department for information.

Otho 8122 Orthodontic Seminar
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Pliska DDS, MS, Benjamin T
Description: Student may contact the instructor or department for information.

Otho 8132 Topics in Orthodontics
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Ekim, Suzan
Description: Student may contact the instructor or department for information.

Otho 8142 Research in Orthodontics
Otolaryngology 8-240 PWB (Mayo Mail Code 396)

Otol 8248 Directed Readings in Auditory Physiology
1-2 credit(s), max credits 2, 1 completion allowed; instr consent Credit will not be granted if credit has been received for: NSC 8248;
Instructor: Anderson, John Harold
Description: Student may contact the instructor or department for information.

Otol 8249 Current Topics in Cochlear Anatomy
1 credit(s);
Instructor: Santi, Peter A
Description: Student may contact the instructor or department for information.

Otol 8250 Advanced Biochemistry of the Auditory System
1 credit(s);
Instructor: Juhn, Steven Sung-Kyun
Description: Student may contact the instructor or department for information.

Pediatric Dentistry 6-150 MoosT

PDen 7000 Directed Research in Pediatric Dentistry
S-N only, 1 credit(s);
Instructor: Jones, Robert S
Description: Student may contact the instructor or department for information.

PDen 7100 Advanced Clinical Pediatric Dentistry
A-F only, 1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

PDen 7200 Advanced Pediatric Dentistry Techniques
S-N only, 0.5 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

PDen 8010 Pediatric Dentistry Diagnosis and Treatment Planning
A-F only, 1 credit(s), max credits 5, 5 completions allowed;
Instructor: Karp, Jeffrey Michael
Description: Student may contact the instructor or department for information.

PDen 8100 Hospital Pediatric Dentistry
S-N only, 1 credit(s);
Instructor: Karp, Jeffrey Michael
Description: Student may contact the instructor or department for information.

PDen 8110 Pediatric Dentistry Outreach Experiences
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Karp, Jeffrey Michael
Description: Student may contact the instructor or department for information.

Pediatrics 13-118 PWB (Box 391 UMHC)

Ped 7091 Independent Study in the Neural Basis of Anger, Tantrums, and Aggression
Pharmaceutics  9-177 Weaver-Densford Hall

Phm 8100 Seminar: Pharmaceutics
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Wiedmann, Timothy Scott
Description: Student may contact the instructor or department for information.

Phm 8110 Readings in Pharmaceutics
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Panyam PhD, Jayanth
Description: Student may contact the instructor or department for information.

Phm 8120 Readings in Central Nervous System (CNS) Drug Delivery
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Fairbanks, Carolyn Ann
Description: Student may contact the instructor or department for information.

Phm 8150 Pharmacokinetics Research Seminar
S-N only, 1 credit(s), max credits 12, 12 completions allowed; Grad Phm major Credit will not be granted if credit has been received for: PHAR 6223;
Instructor: Elmquist, William Frederick
Description: Student may contact the instructor or department for information.

Phm 8481 Advanced Neuropharmaceutics
A-F only, 4 credit(s); instr consent Credit will not be granted if credit has been received for: CMB 8481;
Instructor: Fairbanks, Carolyn Ann
Description: Student may contact the instructor or department for information.

Pharmacology  6-120 Jackson Hall

Phcl 4001 Mechanisms of Drug Action
A-F only, 2 credit(s);
Instructor: Connell, Gregory James
Description: This introductory course is highly appropriate for those students interested in health sciences research, medicine, or the pharmaceutical industry. In our modern society, drug-based strategies are the predominant and often the most effective way to treat disease. This course presents many of the fundamental concepts that define the discipline of Pharmacology by focusing on the derivation of a drug-based strategy to treat a single medical condition. This semester's course will be centered on the development of novel anti-cancer drugs and is designed to be interactive, with both written and oral components. This course can fulfill requirements for the Pharmacology Minor program and is an approved elective for Biology and Neuroscience Majors. Additional Info: Please contact course directors directly or visit the website: Class URL: http://www.pharmacology.med.umn.edu/PHCL4001.html
Style: 60% Lecture, 20% Discussion, 20% Student Presentation.
Grading: 70% mid exam, 25% final exam, 5% in-class presentation.
Exam Format: Short answer, problem solving.

Phcl 4010 Current Research Topics in Pharmacology
A-F only, 1 credit(s), max credits 2;
Instructor: Hiasa, Hiroshi
Description: The goal of this course is to expose students to a variety of cutting-edge research projects in Pharmacology. The course consists of research seminars, discussion sessions, literature-based projects, and oral presentations. Students will learn how to study a research project/literature and give a scientific presentation.

Phcl 4993 Directed Studies
S-N only, 1-3 credit(s), max credits 6;
Instructor: Wei, Li-Na
Phcl 4994 Directed Research
  S-N only, 1-3 credit(s), max credits 12, 4 completions allowed;
  Instructor: Wei,Li-Na
  Description: 

Phcl 5109 Problems in Pharmacology
  1-18 credit(s), max credits 18, 1 completion allowed;
  Instructor: Loh,Horace H
  Description: Research projects and special problems by arrangement.

Phcl 5110 Introduction to Pharmacology
  A-F only, 3 credit(s);
  Instructor: Campbell,Colin R
  Description: Student may contact the instructor or department for information.

Phcl 5112 A Graduate Toolkit I: An Introduction to the Scientific Research Lab
  A-F only, 1 credit(s);
  Instructor: Hiasa,Hiroshi
  Description: Student may contact the instructor or department for information.

Phcl 5113 A Graduate Toolkit II: Scientific Speaking and Writing for Graduate Students
  A-F only, 2 credit(s);
  Instructor: Wickman,Kevin D
  Description: Student may contact the instructor or department for information.

Phcl 5211 Pharmacology
  A-F only, 2 credit(s);
  Instructor: Thayer,Stanley A
  Description: Student may contact the instructor or department for information.

Phcl 8026 Neuro-Immune Interactions
  3 credit(s);
  Instructor: Molitor,Thomas William
  Description: Student may contact the instructor or department for information.

Phcl 8100 Laboratory Research in Pharmacology
  S-N only, 4 credit(s), max credits 8;
  Instructor: Campbell,Colin R
  Description: Student may contact the instructor or department for information.

Phcl 8200 Seminar: Selected Topics in Pharmacology
  A-F only, 1 credit(s), max credits 8, 8 completions allowed;
  Instructor: Walseth,Timothy F
  Description: Student may contact the instructor or department for information.

Phcl 8208 Neuropsychopharmacology
  A-F only, 3 credit(s);
  Instructor: Molitor,Thomas William
  Description: Student may contact the instructor or department for information.

Phcl 8217 Problems in Investigative Pharmacology
  S-N only, 0 credit(s);
  Instructor: Loh,Horace H
  Description: Student may contact the instructor or department for information.
Phcl 8221 Neurobiology of Pain and Analgesia
  3 credit(s);
  Instructor: Honda, Christopher N
  Description:

Phcl 8320 Readings in Neurobiology
  1-4 credit(s), max credits 4, 4 completions allowed;
  Instructor: Fairbanks, Carolyn Ann
  Description: Student may contact the instructor or department for information.

Pharmacy

  5-110 Weaver-Densford Hall

Phar 1001 Orientation to Pharmacy
  2 credit(s);
  Instructor: Kasper, Erin Anne
  Description: Student may contact the instructor or department for information.

Phar 1002 Health Sciences Terminology
  2 credit(s);
  Instructor: Lichtblau PhD, Leonard
  Description: Student may contact the instructor or department for information.

Phar 1003 Non-Prescription Medications and Self-Care: Treating Minor Conditions
  2 credit(s);
  Instructor: Milone PharmD, Anna S
  Description: In this self-study course, students learn about non-prescription medications and self-care available to treat many different medical conditions and are empowered to become informed consumers of over-the-counter medications and testing devices. Topics include allergies, coughs and colds, pain, diarrhea and constipation, insomnia, smoking cessation, birth control, dietary supplements, and medication use in children and the elderly. Students will learn basic causes, signs and symptoms, self-care guidelines, when to see a health care provider, and how to use non-prescription and self-care products safely and effectively. Additionally, students will explore various drug information resources and learn how to find reliable sources both on the Internet and from a pharmacist.
  Style: 90% Web Based.

Phar 1004 Common Prescription Drugs and Diseases
  2 credit(s);
  Instructor: Carlson PharmD, Dawn L
  Description: Student may contact the instructor or department for information.

Phar 1005 Introduction to Drug Therapies of Addiction: Medicine or Menace?
  2 credit(s);
  Instructor: Lichtblau PhD, Leonard
  Description: This course provides students with the opportunity to explore the drug therapies of addiction, the harmful nature of drug addiction, medications associated with addictive properties, and mechanisms that help curb addiction to medications. Topics include drug regulation, drug therapy strategies used to treat pain, and how the concepts of tolerance, physical dependence, and addiction influence care. Mechanism of action of various illicit and prescription medications which are commonly misused will also be covered. Students will be exposed to current issues and discussion topics that surround drug addiction and learn to describe the physiological and pharmacological nature of drug addiction.
  Style: 100% Web Based.
  Grading: 12% reports/papers, 87% additional semester exams.
  Exam Format: There are 4 online, timed exams which have multiple-choice and true/false questions. Exam 4 contains a written portion (paper) in addition to multiple choice and true/false questions.

Phar 1006 Health Literacy
  A-F only, 2 credit(s);
  Instructor: Lowry, Ann E.
  Description: This course addresses the issues associated with health literacy and uncovers the many dimensions associated with misunderstandings that occur in health-related communication. Students will gain a better understanding of the ways in which health
literacy can be improved and the steps individual health care professionals can take to ensure that patients have a better understanding of their health-related issues and treatments. Knowledge of medical terminology is helpful.

Phar 3207 Directed Study: Leadership in Health Care
A-F only, 3 credit(s); The Twin Cities online Phar 3207 and 5207 are equivalent to the online Duluth Phar 3207 and 5207 and credit will not be granted if credit has been received for more than one instance of the courses. Credit will not be granted if credit has been received for: PHAR 5207;
Instructor: Fierke, Kerry K
Description: Student may contact the instructor or department for information.

Phar 3601 Basic Human Physiology for the Health Professions
A-F only, 3 credit(s), max credits 6;
Instructor: Lichtblau PhD, Leonard
Description: This course is entirely online and is designed for pre-health professional students to prepare for more in depth courses. Normal functions (physiology) of the major human organ systems and diseases (pathophysiology) in those systems. There is a simulated lab component to this course.
Style: 83% Lecture, 17% Laboratory. There are five (5) required exams worth 50 points each which are timed and administered online through the LMS. Students have 75 minutes to complete each exam and must complete each exam during a 2-day window.
Grading: 83% quizzes, 17% laboratory evaluation.
Exam Format: Multiple choice and true/false

Phar 3700 Fundamentals of Pharmacotherapy
A-F only, 3 credit(s); Medical terminology Credit will not be granted if credit has been received for: PHAR 5700;
Instructor: Milone PharmD, Anna S
Description: This course is designed for students pursuing careers that require a basic familiarity with drug therapy and focused on basic pharmacology, recognition of brand and generic drug names, therapeutic classes, and common uses. Students will develop a basic understanding of treatment options available for common disease states and a proficiency in the use of drug information resources. Students will learn how to review medication lists and other forms of health communication and documentation.
Style: 100% Web Based.
Grading: 100% quizzes.

Phar 3800 Pharmacotherapy for the Health Professions
A-F only, 3 credit(s); Anatomy/physiology, nursing or respiratory care Credit will not be granted if credit has been received for: PHAR 5800;
Instructor: Lounsbery, Jody Leigh
Description: This online course provides nursing and respiratory care students with a general understanding of drug therapy and its implications in patient care. Topics include medication safety, administration, and monitoring.
Grading: 25% mid exam, 25% final exam, 50% quizzes.
Exam Format: Multiple choice

Phar 4200W Drugs and the U.S. Health Care System
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: PHAR 5200; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Milone PharmD, Anna S
Description: Phar 4200W Drugs and the US Healthcare System 3 cr. Prereqs: none Instructor: Milone, Anna, PharmD. This is not a self-study course. This completely online course prepares students to be informed and responsible users of medications within the healthcare system and fulfills a writing intensive requirement. Medication development, regulation and distribution in the US are explored, along with the business, political and legal/ethical issues involved. Through weekly reading and writing assignments, participants identify and substantiate their own stances on issues. Requirements include short writing assignments (finished writing in the form of postings to a discussion board) each week, self-reflections, and a Final Project allowing exploration of issues of interest to you. For more information, contact rxsystem@umn.edu or 612-625-4235.
Style: 100% Web Based.
Grading: 35% reports/papers, 30% reflection paper, 35% in-class presentation. Class participation is defined as weekly postings to course discussion board.
Exam Format: there are no exams

Phar 4248 Drugs of Abuse
A-F only, 2 credit(s);
Instructor: Remmel, Rory P
**Description:** The course will cover the chemical aspects of the active constituents of herbal-based drugs of abuse e.g. marihauna, coca, Salvia, khat, etc. as well as the semi-synthetic or synthetic drugs of abuse such as heroin, morphine, and other opiates, cocaine, methamphetamine, MDMA (Ecstasy), downers and depressants, and date rape drugs such as GHB and Rohypnol. The pharmacology and toxicology of each of the classes of drugs of abuse will be discussed in depth. In addition, the sociological aspects of drug abuse will be presented through selected documentaries and films. Each student will be required to read one book on addiction and provide a written report. Exams will be given on-line in multiple choice short answer formats. The course is intended for pre-professional students in the health sciences but may be taken by other students in the biomedical sciences with the pre-requisite of Organic Chemistry. The course director, Dr. Rory Remmel, teaches in the College of Pharmacy and received the 2010 Award for Outstanding Contributions to Graduate and Professional Education.

**Style:** 50% Lecture, 40% Film/Video, 10% Discussion. 3:30 to 5:30 on Wednesdays

**Grading:** 40% mid exam, 50% final exam, 10% reports/papers. A-F, S or N

**Exam Format:** Multiple choice

**Phar 4294 Directed Study I for Undergraduates**
- 1-5 credit(s), max credits 10;
- **Instructor:** Panyam PhD,Jayanth
- **Description:** Student may contact the instructor or department for information.

**Phar 5200 Drugs and the U.S. Health Care System**
- A-F only, 3 credit(s); grad or professional student
- **Instructor:** Milone PharmD,Anna S
- **Description:** Phar 5200 Drugs and the US Healthcare System 3 cr, Prereqs: graduate student or permission of instructor

Instructors: Milone, Anna, PharmD. This online course prepares students to be informed and responsible participants in debates related to medications within the U.S. healthcare system. Medication development, regulation and distribution in the US are explored, along with the business, political and legal/ethical issues involved. Through weekly reading and writing assignments, participants identify and substantiate their own stances on issues. Requirements include short writing assignments (finished writing in the form of postings to a discussion board) each week, self-reflections, and a Final Project, allowing exploration of issues of interest to you. For more information, contact rxsystem@umn.edu or 612-625-4235.

**Style:** 100% Web Based.

**Grading:** 35% reports/papers, 30% reflection paper, 30% class participation.

**Phar 5201 Health Sciences Applied Terminology**
- 2 credit(s);
- **Instructor:** Lichtblau PhD,Leonard
- **Description:** Student may contact the instructor or department for information.

**Phar 5205 Obesity: More than Just a Prescription**
- A-F only, 2 credit(s);
- **Instructor:** Boosalis,Maria G
- **Description:** This course covers the essential information necessary for the prevention, treatment, and management of obesity from the individual adipose cell to the entire public health community. Course content will include the etiology of obesity, contributing mechanisms, nutrition assessment, medical nutrition therapy as well as considerations in its treatment and prevention throughout the life-cycle and beyond. Students will explore the role of pharmacy in curtailing this epidemic. A grounding in biology, chemistry, anatomy and medical terminology is helpful.

**Phar 5206 Health Literacy: Decoding Health Information**
- A-F only, 2 credit(s);
- **Instructor:** Lowry,Ann E.
- **Description:** This course addresses the issues associated with health literacy and uncovers the many dimensions associated with misunderstandings that occur in health-related communication. Students will gain a better understanding of the ways in which health literacy can be improved and the steps individual health care professionals can take to ensure that patients have a better understanding of their health-related issues and treatments. Knowledge of medical terminology is helpful.

**Phar 5207 Directed Study: Leadership in Health Care**
- A-F only, 3 credit(s); advanced undergraduates, professional health care students, graduate students
- **Instructor:** Fierke,Kerry K
- **Description:** Student may contact the instructor or department for information.
Phar 5700 Applied Fundamentals of Pharmacotherapy  
A-F only, 3 credit(s); Medical terminology and admission to grad program or instr consent  
Credit will not be granted if credit has been received for: PHAR 3700;  
Instructor: Milone PharmD, Anna S  
Description: This graduate student course is designed for students pursuing careers that require a basic familiarity with drug therapy and focused on basic pharmacology, recognition of brand and generic drug names, therapeutic classes, and common uses. Students will develop a basic understanding of treatment options available for common disease states and a proficiency in the use of drug information resources. Students will learn how to review medication lists and other forms of health communication and documentation. Students will develop a thesis-driven multimedia presentation based on research conducted using peer-reviewed materials.

Phar 5800 Pharmacotherapy for the Health Professions  
A-F only, 3 credit(s); Nursing grad program  
Credit will not be granted if credit has been received for: PHAR 3800;  
Instructor: Lounsbery, Jody Leigh  
Description: Prereq: Nursing Graduate Student This graduate student course provides Master of Nursing students with a general understanding of drug therapy and its implications in patient care. Topics include medication safety, administration, and monitoring.

Philosophy 831 Heller Hall

Phil 1001 Introduction to Logic  
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1001H; Meets CLE req of Mathematical Thinking  
Instructor: Wolston, Maran Peterson  
Description: Student may contact the instructor or department for information.

Phil 1001 Introduction to Logic  
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1001H; Meets CLE req of Mathematical Thinking  
Instructor: Gutt, Nathan Daniel  
Description: Student may contact the instructor or department for information.

Phil 1002W Introduction to Philosophy  
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1006W; Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive  
Instructor: Panagopoulos, Anastasia  
Description: This is a fully online course offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit “Class URL” for ODL policy, fee, and financial aid restrictions. Many of the questions that you hear about on TV and in the popular press today are actually philosophical problems: Should abortion be permitted? Do animals have rights? Can computers think? Philosophy, however, isn’t only a set of questions. It also includes its own methodology, one that uses logical arguments in an attempt to answer questions. In this course, you will read articles about ethics, knowledge, religious belief, and the human condition. These articles will speak to the issues that are most central to your being—your beliefs and ideologies, your sense of yourself, and your relations with others and with the world. You will be asked to do philosophy, not merely to report on it, and in doing so, you will need to consider alternate viewpoints, make arguments, be critical, and spend some time thinking about what you read.  
Style: Online  
Grading: 100% written homework.

Phil 1002W Introduction to Philosophy  
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1006W; Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive  
Instructor: Herr, Mark Zimmerman  
Description: Student may contact the instructor or department for information.

Phil 1003W Introduction to Ethics  
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1003V; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive  
Instructor: Doyle, Tom  
Description: Student may contact the instructor or department for information.

Phil 1003W Introduction to Ethics
Phil 1004W Introduction to Political Philosophy

Instructor: Holtman, Sarah Williams
Description: What is the purpose of the state? What obligations does it have to its citizens? What do citizens owe to one another and to the state itself? What are justice, property, liberty, and the "social contract"? How are these concepts related to one another and to an appropriate understanding of political society? We will investigate these and related questions by appeal to works including Hobbes's "Leviathan," Locke's "Second Treatise of Government," and Rousseau's "Social Contract." We will supplement texts by appeal to contemporary political issues (E.g., those surrounding the funding of public education, the provision of welfare and other benefits to the needy, and the use and justification of criminal punishment.)
Style: 75% Lecture, 25% Discussion.
Grading: 25% final exam, 60% reports/papers, 10% quizzes, 5% class participation.
Exam Format: In class essay exams (midterm and final)

Phil 1005 Scientific Reasoning

Instructor: Love, Alan C
Description: Every day we are bombarded by information derived from scientific research on issues such as genetic engineering and global warming. These claims are directly related to technologies that shape our modern society (e.g., genetically modified food and modes of transportation), and are also central components of contentious public policy discussions. Sometimes the claims appear contradictory, such as those about nutritional benefits: are red wine and chocolate really good for us? What makes claims about these topics 'scientific'? What is the form of the reasoning that supports them? How can we make informed evaluations of scientific claims and their technological outcomes in order to participate knowledgeably in our society's political process and make the best choices in our everyday life? This course addresses these questions (and more) through an introductory analysis of the nature of scientific reasoning. We will evaluate characteristics of theoretical, causal, and statistical hypotheses by exploring a variety of case studies from past and present scientific research. Along the way we will apply our discoveries to contested domains, such as reports about extraterrestrials or astrological inference, and consider models of decision making that inform our day-to-day choices, especially when we lack or are unable to secure relevant scientific information. This course is designed for students of all majors with an interest in the topic.
Style: 65% Lecture, 30% Discussion, 5% Web Based.
Grading: 25% final exam, 24% reports/papers, 24% quizzes, 1% attendance, 2% class participation, 24% problem solving.
Attendance/class participation percentages pertain to discussion sections and online forums, not lectures.
Exam Format: Short answer
Phil 1006W Philosophy and Cultural Diversity
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1002W; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Wilson, Brian T
Description: Student may contact the instructor or department for information.

Phil 1007 Introduction to Political Philosophy Practicum
1 credit(s);
Instructor: Holtman, Sarah Williams
Description: Student may contact the instructor or department for information.

Phil 1905 Topics: Freshman Seminar: Minds: Natural and Artificial
A-F only, 3 credit(s), max credits 6;
Instructor: Owens, Joseph I
Description: Student may contact the instructor or department for information.

Phil 1905 Topics: Freshman Seminar: Comics as Art
A-F only, 3 credit(s), max credits 6;
Instructor: Cook, Roy Thomas
Description: Comics were once thought to be appropriate only for children. Recently, however, telling a story by combining drawings and word balloons has acquired an unexpected (but not undeserved!) respectability: The Holocaust memoir Maus won a Pulitzer Prize; the graphic novel Watchmen appeared on Time Magazine's Top 100 Novels of All-Time list; and Jimmy Corrigan, The Smartest Kid on Earth won the prestigious Guardian First Book Award. In this seminar, we will explore the idea that comics are as legitimate an art form as painting or poetry. We will ask: How do comics differ from other artistic media? How does reading a comic differ from reading poetry or novels? How have comics influenced, and been influenced by, culture and politics? And what, exactly, makes a comic a comic (and not something else)?

Phil 1910W Topics: Freshman Seminar: What's So Great About Classical Music?
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kac, Michael B
Description: Despite what you may have heard, classical music isn't just a dry, arid landscape of interest only to culture snobs. The great masterpieces are supreme products of the human imagination touching on all aspects of the human condition -- comic, tragic, sacred, profane. This is music that has moved generations of listeners to laughter and to tears, while at the same time inviting them to contemplate and reflect on its inner order and architectural grandeur. This seminar will present some of the great works of the classical tradition along with an explanation of what makes them so remarkable. No prior knowledge about music is required -- just bring an open mind.

Phil 3001W General History of Western Philosophy: Ancient Period
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Peterson, Sandra Lynne
Description: The course will study the beginnings of philosophy in the Western world. The ancient Greek philosophers to be studied include Heraclitus, Parmenides, Gorgias, Socrates, Plato, Aristotle, and Sextus Empiricus. The course will reflect on some of the answers those thinkers gave to such questions as 'What is there?', 'What can we know about it?' and 'What should we do about it?' In studying these philosophers, we will also consider the question what they thought philosophy was. The course is for both majors and non-majors. Readings will be some fragments of the PreSocratics, several dialogues of Plato's, selections from Aristotle's writings, and Sextus Empiricus 'Outlines of Scepticism'.
Style: 5% Lecture, 95% Discussion.
Grading: 80% reports/papers, 20% class participation.

Phil 3003 General History of Western Philosophy: Medieval Period
3 credit(s);
Instructor: Hopkins, Jasper
Description: The course attempts to provide an overview of the thought of Augustine (an important precursor of the Middle Ages), Anselm, Maimonides, Aquinas, and Nicholas of Cusa. Mention is also made of Avicenna, Averroes, and Ockham. All texts for the course are on-line books and articles and, thus, will not be found in the bookstore and will not cost anything. Questions such as the following are explored from the Medieval perspective: Is it rational not to believe in God? Can one know, other than symbolically, what God's attributes are? Is the expression 'to know by faith' intelligible? Is Nominalism or Realism the preferable doctrine as regards the ontological status of universals? Can I know for certain anything besides my own present existence? Is it true for certain that si fallor, sum? Attendance is required. There will be three examinations, each covering a different part of the course.
Style: 75% Lecture, 25% Discussion.
Grading: Each examination will cover a separate part of the course and will determine, approximately, one-third of the semester grade. There is no final examination as such. Attendance is required. Unexcused absences of more than one week will be penalized.
Exam Format: varies

Phil 3301 Environmental Ethics
4 credit(s); Meets CLE req of Environment
Instructor: Warren, Karen J.
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Environmental Ethics is a field of philosophy that explores both a variety of real-life contemporary environmental issues and theoretical frameworks for understanding and evaluating them. The "applied" issues include: animal rights; ethical vegetarianism; the morality of zoos; wilderness preservation; climate change; population and consumption; air and water pollution; ecocide; interconnections among gender, race/ethnicity, class and environmental harms or illnesses; environmental racism; "green economics;" the greening of spirituality. The "theoretical" issues include: animal welfare; Leopold's land ethics; deep ecology; social ecology; ecofeminist philosophy and ethics; models of social and environmental justice; environmental virtue ethics; environmental pragmatism; political ecology; continental environmental philosophy; stewardship ethics; non-Western religious environmental ethics. The interplay between the applied and the theoretical aspects of environmental ethics is a key structural and substantive feature of this course. In addition, this course will teach invaluable critical thinking and writing skills for both doing philosophy and for each student to develop and formulate her or his own environmental ethic.

Phil 3302W Moral Problems of Contemporary Society
4 credit(s); Credit will not be granted if credit has been received for: PHIL 3322W; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Kortbein, Josh
Description: Student may contact the instructor or department for information.

Phil 3305 Medical Ethics
4 credit(s);
Instructor: Hopkins, Jasper
Description: The course deals with a number of typical problems encountered in the area of medical ethics--problems related to brain death, the persistent vegetative state, partial-birth abortion, informed consent, confidentiality, organ donation and retrieval, patients' rights, physician-assisted suicide, medical futility, human and animal research, medical errors, health-care rationing, managed care, involuntary commitment, forcible treatment, cloning, genetic enhancement, and so on. Attendance is required. There will be three examinations, each covering a different part of the course.
Style: 60% Lecture, 25% Film/Video, 15% Discussion.
Grading: Each exam counts for approximately one-third of the semester grade.
Exam Format: varies

Phil 3311W Introduction to Ethical Theory
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Swartwood, Jason David
Description: Student may contact the instructor or department for information.

Phil 3601W Scientific Thought
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Uffink, Jos
Description: Student may contact the instructor or department for information.

Phil 3993 Directed Studies
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Students may contact the instructor or department for information.

Phil 4010 Ancient Philosophers
3 credit(s), max credits 6;
Instructor: Lewis, Douglas E
Description: Epicurus & the Epicureans: In today's language an epicurean is a person devoted to sensual enjoyment, especially that of fine and expensive food and drink. Epicurus taught the opposite: how to take pleasure in simple fare like bread and water (with, occasionally, a sumptuous meal). Enjoyment is not indulgence of the senses, but absence of fear (of death, the gods, for example) and
of unfulfilled desires. In this course we will study these teachings along with their theoretical basis: the doctrine of atoms and void, placing them in historical context. The course covers the metaphysics, physics, psychology, political theory, ethics, life practice, and influence from the 3rd c BCE to the present of the epicureans. Warning: study of epicureans can be life changing. Texts: Epicurus, The Epicurus Reader, trans. Inwood and Gerson; Lucretius, Of the Nature of the Universe (De rerum natura), trans. Latham and Goodwin; Epicurus: His Continuing Influence and Contemporary Relevance, eds. Gordon and Suits.

**Style:** 15% Lecture, 70% Discussion, 15% Student Presentation.

**Grading:** 70% reports/papers, 10% attendance, 10% journal, 10% in-class presentation.

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**Phil 4105W Epistemology**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Hanks, Peter William

**Description:** Epistemology is the theory of knowledge. It is concerned with questions like: What is knowledge? What is the extent of our knowledge? Do we have knowledge of the external physical world? What is skepticism about knowledge? Are there good arguments for skepticism? If so, how should we respond to these arguments? We'll address these and related questions through the study of historical and contemporary texts.

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**Phil 4231 Philosophy of Language**

3 credit(s);

**Instructor:** Owens, Joseph I

**Description:** On the one hand, our ability to employ and understand a language is a mundane sort of thing, familiar to all and posing no great puzzle. But when one tries to go beyond the obvious, to develop some genuine understanding of the phenomenon, one is quickly faced with a number of deep and puzzling problems and even paradox. In this course we will probe a number of interrelated issues: What is the linkage between mind and meaning? How is reference determined? What is mental content and how is it determined? Etc. There are two required texts: Martinich, A. P. (ed.) The Philosophy of Language?5th edition. Oxford University Press. Morris, Michael, An Introduction to the Philosophy of Language. Cambridge University Press. Written assignments: One short paper, and one longer term paper.

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**Phil 4325 Education and Social Change**

A-F only, 4 credit(s); Credit will not be granted if credit has been received for: PHIL 5323; Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics

**Instructor:** Wallace, John R

**Description:** This course focuses on a family of approaches to education that has shown promise in moving societies in several parts of the world toward greater justice, democracy, peace-mindedness, self-understanding and environmental responsibility. This family of approaches is known by various names, including, popular education, democratic education, and participatory education. The course integrates a seminar, focusing on theory, with a practicum at various places in the Twin Cities, including the Jane Addams School for Democracy, the Southside Family Charter School, the Franklin Library, and other places where democratic education is being practiced. The purpose is to provide students a theory-rich apprenticeship in democratic education, an apprenticeship that weaves together first-hand field participation at a democratic education site with the study of theories about and case studies of democratic education. A student will emerge from the course with a theory rich apprenticeship in democratic education, an apprenticeship that weaves together first-hand field participation at a democratic education site with the study of theories about and case studies of democratic education. This course counts toward the Arts/Humanities core requirement and the Civic Life and Ethics theme requirement. The course carries 4 credits.

**Style:** 15% Lecture, 70% Discussion, 15% Service Learning. Enrollment is capped at 18 students, just the right size to form a community of inquiry.

**Grading:** 50% reflection paper, 50% class participation.

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**Phil 4414 Political Philosophy**

3 credit(s);

**Instructor:** Holtman, Sarah Williams

**Description:** We will examine issues in political philosophy using historical sources -- principally the work of Hobbes, Hume and Rousseau. Topics will include: justice; liberty; equality; the concept of a social contract; possible justifications for the institution of private property and for acts of civil disobedience. The course is designed for advanced undergraduate majors and for graduate students.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 30% final exam, 70% reports/papers.

**Exam Format:** Take home essay.

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**Phil 4605 Space and Time**

3 credit(s); Courses in [philosophy or physics] or instr consent Credit will not be granted if credit has been received for: PHIL
5605;
Instructor: Uffink, Jos
Description: Student may contact the instructor or department for information.

**Phil 4607 Philosophy of the Biological Sciences**

3 credit(s);
Instructor: Love, Alan C
Description: Contemporary biology is growing faster than almost any other branch of science and yet many philosophical issues arise in the midst of the concepts and practices of life science researchers. Besides those that receive routine play in the media (what is 'intelligent design'? what is 'Darwinism'?), there are a variety of issues of interest. What is the structure of evolutionary theory? What are the units of selection? What is the relationship between evolution and development? Are all biological phenomena reducible to genes? What are adaptations, and how do we identify them? Is there a progressive trend in the history of life? Is there such a thing as 'human nature'? This course is an introduction to these and other philosophical issues in the biological sciences with an emphasis on how these ideas have emerged and developed through history. It is designed for anyone with an interest in conceptual questions and debates in biology that are manifested across a variety of majors (e.g., Animal Science; Anthropology; Biochemistry; Biology, Society and Environment; Biosystems and Agricultural Engineering; Chemistry; Ecology, Evolution and Behavior; Genetics, Cell Biology and Development; Microbiology; Neuroscience; Physiology; Plant Biology; Psychology).

Style: 45% Lecture, 45% Discussion, 5% Student Presentation, 5% Web Based.
Grading: 55% reports/papers, 15% written homework, 5% attendance, 20% in-class presentation, 5% class participation. Written homework corresponds to the questions submitted for class discussion.

**Phil 4622 Philosophy and Feminist Theory**

3 credit(s); 8 crs in [philosophy or women's studies] or instr consent Credit will not be granted if credit has been received for: GWSS 4122;
Instructor: Scheman, Naomi
Description: This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of "post-positivist realism," critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970's had provided a central example for a 1993 paper of Satya Mohanty's that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.

Style: 40% Lecture, 60% Discussion.
Grading: 55% reports/papers, 45% reflection paper. web and in-class participation can improve one's grade
Exam Format: N/A

**Phil 4993 Directed Studies**

1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

**Phil 4995 Senior Project (Directed Studies)**

A-F only, 1 credit(s);
Instructor: Tiberius, Valerie
Description: Student may contact the instructor or department for information.

**Phil 5010 Ancient Philosophers**

3 credit(s), max credits 6;
Instructor: Lewis, Douglas E
Description: Epicurus & the Epicureans: In today's language an epicurean is a person devoted to sensual enjoyment, especially that of fine and expensive food and drink. Epicurus taught the opposite: how to take pleasure in simple fare like bread and water (with, occasionally, a sumptuous meal). Enjoyment is not indulgence of the senses, but absence of fear (of death, the gods, for example) and of unfulfilled desires. In this course we will study these teachings along with their theoretical basis: the doctrine of atoms and void, placing them in historical context. The course covers the metaphysics, physics, psychology, political theory, ethics, life practice, and influence from the 3rd c bce to the present of the epicureans. Warning: study of epicureans can be life changing. Texts: Epicurus, The Epicurus Reader, trans. Inwood and Gerson; Lucretius, Of the Nature of the Universe (De rerum natura), trans. Latham and Goodwin; Epicurus: His Continuing Influence and Contemporary Relevance, eds. Gordon and Suits.
Style: 15% Lecture, 70% Discussion, 15% Student Presentation.
Grading: 70% reports/papers, 10% attendance, 10% journal, 10% in-class presentation.

Phil 5201 Symbolic Logic I
4 credit(s);
Instructor: Cook, Roy Thomas
Description: Student may contact the instructor or department for information.

Phil 5605 Space and Time
3 credit(s);
Courses in [philosophy or physics] or instr consent
Credit will not be granted if credit has been received for: PHIL 4605;
Instructor: Uffink, Jos
Description: Student may contact the instructor or department for information.

Phil 5622 Philosophy and Feminist Theory
3 credit(s);
8 crs in [philosophy or women's studies] or instr consent
Credit will not be granted if credit has been received for: PHIL 4622;
Instructor: Scheman, Naomi
Description: This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of "post-positivist realism," critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970's had provided a central example for a 1993 paper of Satya Mohanty's that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.
Style: 40% Lecture, 60% Discussion.
Grading: 55% reports/papers, 45% reflection paper. web and in-class participation can improve one's grade
Exam Format: N/A

Phil 5993 Directed Studies
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phil 8310 Seminar: Moral Philosophy
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Tiberius, Valerie
Description: Practical Wisdom Practical wisdom is an important virtue that has received little philosophical attention in recent years. The course will explore relevant literature in virtue ethics, meta-ethics, virtue epistemology and moral psychology.

Phil 8670 Seminar: Philosophy of Science
3 credit(s), max credits 6;
Instructor: Alexander, Jennifer Karns
Description: How to characterize cultural change and whether it should be described as an evolutionary process has inspired debate since the time of Darwin and Spencer. In the last 25 years this topic has seen an explosive growth in interest, relevant theory, and new empirical studies. At the heart of these debates are arguments about the relevance of biological processes to cultural ones, and whether the processes are similar enough to justify the use of similar terms. Central to the question is the role of technologies in serving as cumulative repositories of human endeavor, which seem to enable humans to do more than merely adapt to their environments; technologies seem to enable humans to extend the reach of their adaptations beyond the individual and the group to allow widespread cultural change. This seminar investigates the ways in which cultural evolution and technological evolution are linked, through the acquisition and transfer of human skill, and through the organizational and intellectual scaffolding that enables societies to accumulate and build upon experiences and innovations.
Style: 90% Discussion, 10% Student Presentation. Almost all of class time will be devoted to discussion of readings.
Grading: 50% reports/papers, 50% class participation. Attendance is required.

Physical Education | 220 Cooke Hall
PE 1004 Diving: Springboard
- OPT No Aud, 1 credit(s);
- Instructor: Street, Meagan A
- Description: All class materials provided. Course open to anyone interested in learning about diving as a sport. Course involves notes on technical aspects of competitive diving, actual participation in learning how to dive, safely and correctly.

PE 1007 Beginning Swimming
- OPT No Aud, 1 credit(s);
- Instructor: Street, Meagan A
- Description: Introduction to basic aquatic safety, fundamentals of swimming and hydrodynamics. Principles of hydrodynamics and stroke mechanics; five basic strokes; basic rescue techniques with use of pool equipment; hydrotherapy for disabilities and other conditions, opportunities for competitive activities, lifetime enjoyment of aquatics.

PE 1007 Beginning Swimming
- OPT No Aud, 1 credit(s);
- Instructor: Novotny, Jessica Lynn
- Description: Introduction to basic aquatic safety, fundamentals of swimming and hydrodynamics. Principles of hydrodynamics and stroke mechanics; five basic strokes; basic rescue techniques with use of pool equipment; hydrotherapy for disabilities and other conditions, opportunities for competitive activities, lifetime enjoyment of aquatics.

PE 1007 Beginning Swimming
- OPT No Aud, 1 credit(s);
- Instructor: Brandes, Megan Ann
- Description: Student may contact the instructor or department for information.

PE 1007 Beginning Swimming
- OPT No Aud, 1 credit(s);
- Instructor: Betker, Morgan R
- Description: Student may contact the instructor or department for information.

PE 1007 Beginning Swimming
- OPT No Aud, 1 credit(s);
- Instructor: White, Annie
- Description: Student may contact the instructor or department for information.

PE 1012 Beginning Running
- OPT No Aud, 1 credit(s);
- Instructor: Hippen, Lois Margarete

PE 1012 Beginning Running
- OPT No Aud, 1 credit(s);
- Instructor: Rhodes, Greg
- Description: Student may contact the instructor or department for information.

PE 1014 Conditioning
- OPT No Aud, 1 credit(s);
- Instructor: Brown, Scott
- Description: Conditioning is a beginning-level class. It is designed to introduce the basic fundamentals of personal fitness. The topics covered are the following: principles of fitness, health-related and motor-skill related components of fitness, principles of training and conditioning programs, nutrition, weight control, common fitness injuries, and stress management. Heart rate monitor required; may be purchased at URCTR for approximately $50.

PE 1015 Weight Training
- OPT No Aud, 1 credit(s);
- Instructor: Fitzgerald, John S
- Description: Introduction to weight training. Basic aspects of weight training including exercise selection and technique, charting workouts, program design, nutritional considerations, and safety.

PE 1015 Weight Training
- OPT No Aud, 1 credit(s);
- Instructor: Johnson, Samuel Cory
- Description: Introduction to weight training. Basic aspects of weight training including exercise selection and technique, charting workouts, program design, nutritional considerations, and safety.
PE 1015 Weight Training
  OPT No Aud, 1 credit(s);
  Instructor: Bhalla PhD, Jennifer Anita
  Description: Student may contact the instructor or department for information.

PE 1015 Weight Training
  OPT No Aud, 1 credit(s);
  Instructor: Billing, Lauren Elizabeth
  Description: Student may contact the instructor or department for information.

PE 1016 Posture and Individual Exercise
  OPT No Aud, 1 credit(s);
  Instructor: Lemler, Lisa Lynn
  Description: Good posture techniques, individual exercises, fitness concepts, and mental techniques. Specific overall sound body and mind techniques to include flexibility exercises, cardiovascular fitness, resistance training, nutrition management, weight control, stress management, and self-thought.

PE 1029 Handball
  OPT No Aud, 1 credit(s);
  Instructor: Hiber, Matthew Frank
  Description: This course has been designed as an introductory level activity program for handball players. Its intent is to familiarize students with the rules of handball and teach the fundamental skills of this challenging sport. Daily activities will focus on entry-level drills, playing games, and learning appropriate handball etiquette. Students will be expected to purchase handball gloves, handballs, and protective eyewear. There will be a $35 equipment fee.
  Style: 10% Lecture, skills and activities
  Grading: 10% mid exam, 10% final exam, 80% class participation.
  Exam Format: One T/F test and one short answer test

PE 1029 Handball
  OPT No Aud, 1 credit(s);
  Instructor: Johnson, Matthew Lloyd
  Description: Student may contact the instructor or department for information.

PE 1031 Sabre Fencing
  OPT No Aud, 1 credit(s);
  Instructor: Sobalvarro, J Roberto
  Description: Basic sabre techniques, movement, an overview of fencing as a recreational sport and an Olympic sport, and the history of fencing.

PE 1032 Badminton
  OPT No Aud, 1 credit(s);
  Instructor: Gasior, Lisa J
  Description: Student may contact the instructor or department for information.

PE 1032 Badminton
  OPT No Aud, 1 credit(s);
  Instructor: Billing, Lauren Elizabeth
  Description: Student may contact the instructor or department for information.

PE 1033 Foil Fencing
  OPT No Aud, 1 credit(s);
  Instructor: Sobalvarro, J Roberto
  Description: Fencing fundamentals, including basic foil techniques, movement, a general overview of fencing as a recreational sport and an Olympic sport, and the history of fencing.

PE 1034 Judo
  OPT No Aud, 1 credit(s);
Instructor: Crone, Tom
Description: The judo class instructs students in the basic skills of throwing, grappling (matwork), choking and arm lock techniques, and falling skills. These are the basic skills used in contest judo, and also have personal defense application of a very realistic and practical nature. Students are also given an appreciation of the evolution of judo from Jiu-Jitsu, and they learn the fundamental rules and scoring of contest. Action videos are used both for instruction of techniques and appreciation of contests. The principles of judo and its philosophy as they apply to daily life enhancement, are also covered.
Style: 5% Lecture, 5% Discussion. Physical instruction of judo techniques and skill application.
Grading: 15% mid exam, 20% final exam, 65% class participation. There is a final physical skills exam which is factored into the overall Class Participation grade. It consists of student chosen techniques from the semester.
Exam Format: Mid Term & Final: Matching, multiple choice, true/false Physical Exam: Demonstration of skills

PE 1035 Karate
OPT No Aud, 1 credit(s);
Instructor: Fusaro, Robert L
Description: This course will introduce the student to Japanese Shotokan Karate (traditional karate); a style of karate that is natural and functional. Students will learn proper posture and methods to develop power and control utilizing feet, legs, and hips. The principal of body dynamics, which Shotokan Karate is noted for, will enable a person of 100 pounds or less to develop power capable of defending themselves against a person of greater size and weight. Shotokan Karate is a non-contact martial art in which no protective gear or gloves of any type is worn. Therefore, control is essential. Men, women, and children can participate in this exhilarating martial art without fearing for their well-being. Structural foundation is essential for developing a delivery system for blocking, kicking, and punching, techniques which are basic elements of self-defense. These movements will be reviewed throughout the entire semester. A portion of the latter half of the course will be devoted to application of these basic techniques. Purchase of GI uniform is encouraged; GI uniform is available through the instructor at a cost of $35.
Style: 15% Discussion. training; 5% exams
Grading: 20% mid exam, 70% final exam, 10% other evaluation. Attendance
Exam Format: Mid-term: 20 short multiple choice questions; Final: physical test on basic movements worked on during the semester

PE 1036 Racquetball
OPT No Aud, 1 credit(s);
Instructor: Morrissey, Sean Patrick
Description: Fundamentals of racquetball, including equipment; safety and etiquette; terminology; game rules of singles, doubles, and cutthroat; grips; basic strategies; serves and shots.

PE 1036 Racquetball
OPT No Aud, 1 credit(s);
Instructor: Hoffman, Mitchell Lee
Description: Fundamentals of racquetball, including equipment; safety and etiquette; terminology; game rules of singles, doubles, and cutthroat; grips; basic strategies; serves and shots.

PE 1036 Racquetball
OPT No Aud, 1 credit(s);
Instructor: Phillips, Brian William
Description: Student may contact the instructor or department for information.

PE 1037 Squash Racquets
OPT No Aud, 1 credit(s);
Instructor: Stever, John Ball
Description: This course has been designed as an introductory-level activity program for novice squash players. Its intent is to familiarize the individual with the play, rules, equipment, and courts of the game. Weekly lessons will focus on entry-level technique as well as safety on and around the court. Upon completion of this course, students will: 1) have learned the mechanics of the basic squash strokes; 2) understand positioning and movement on the court; 3) understand and apply the international rules for play; 4) be able to describe the basic dimensions and markings of an international squash rackets court; and 5) be able to select and care for equipment. The texts for the course include the well-illustrated Squash: Steps to Success by Yarrow (1997), and the "International Squash Rules" as published by the World Squash Association on the Internet.
Style: 15% Lecture, 10% Film/Video. 75% on court for drills and games. Much of lecture is also on court.
Grading: 20% mid exam, 20% attendance, 60% other evaluation. On court evaluation of improvement on basic techniques
Exam Format: Multiple choice, T/F

PE 1038 Beginning Tennis
OPT No Aud, 1 credit(s);
Instructor: Sanny, John H
Description: Fundamental strokes, including forehands, backhands, volleys, lobs, overheads, and serves; introduction to doubles play; terminology, rules, and etiquette.

PE 1038 Beginning Tennis
OPT No Aud, 1 credit(s);
Instructor: Haertl, Daniel Thomas
Description: Fundamental strokes, including forehands, backhands, volleys, lobs, overheads, and serves; introduction to doubles play; terminology, rules, and etiquette.

PE 1043 Beginning Horse Riding
OPT No Aud, 1 credit(s);
Instructor: Luetmer, Sadie Marie
Description: Student may contact the instructor or department for information.

PE 1044 Self-Defense
OPT No Aud, 1 credit(s);
Instructor: Bendickson, Anita Olivia
Description: Course consists of learning basic physical and psychological skills to help the student recognize and act in crisis and pre-crisis situations: to avoid or stop physical assault, harassment, irritating and/or dangerous situations and encounters. Physical skills include basic striking, kicking, shifting (learning to move out of the way), blocking, and specialized techniques for specific situations. Psychological skills include learning to analyze self-defense situations, i.e., what strengths does the student have, what vulnerabilities does his/her opponent have and what opportunities are there to apply those strengths and use those vulnerabilities. This includes developing an understanding of force, eye contact and strong body language, and basic verbal skills such as assertiveness. Class work will include drills in physical techniques to develop coordination and strength, practice time in hitting and kicking bags, many controlled situations with partners (including floor, weapon, and multiple attacker situations) to teach basic skills of analysis and application.
Style: 10% Discussion.
Grading: 50% final exam, 20% reports/papers, 30% class participation.
Exam Format: Physical demonstration of basic skills plus student's choice of one from each of the following four categories (partner exercises): 1) basic blocking, 2) response to a grab from the front, 3) response to a grab from behind, 4) one special situation.

PE 1044 Self-Defense
OPT No Aud, 1 credit(s);
Instructor: Brandl, Mary Kathryn
Description: Course consists of learning basic physical and psychological skills to help the student recognize and act in crisis and pre-crisis situations: to avoid or stop physical assault, harassment, irritating and/or dangerous situations and encounters. Physical skills include basic striking, kicking, shifting (learning to move out of the way), blocking, and specialized techniques for specific situations. Psychological skills include learning to analyze self-defense situations, i.e., what strengths does the student have, what vulnerabilities does his/her opponent have and what opportunities are there to apply those strengths and use those vulnerabilities. This includes developing an understanding of force, eye contact and strong body language, and basic verbal skills such as assertiveness. Class work will include drills in physical techniques to develop coordination and strength, practice time in hitting and kicking bags, many controlled situations with partners (including floor, weapon, and multiple attacker situations) to teach basic skills of analysis and application.
Style: 10% Discussion.
Grading: 50% final exam, 20% reports/papers, 30% class participation.
Exam Format: Physical demonstration of basic skills plus student's choice of one from each of the following four categories (partner exercises): 1) basic blocking, 2) response to a grab from the front 3) response to a grab from behind 4) one special situation.

PE 1045 Rock Climbing
OPT No Aud, 1 credit(s);
Instructor: Stewart, Jennifer L
Description: Student may contact the instructor or department for information.

PE 1045 Rock Climbing
OPT No Aud, 1 credit(s);
Instructor: Bipes, Theresa Helen
Description: Student may contact the instructor or department for information.
PE 1045 Rock Climbing  
OPT No Aud, 1 credit(s);  
Instructor: Karban,Bryan Daniel  
Description: Student may contact the instructor or department for information.

PE 1046 Tae Kwon Do  
OPT No Aud, 1 credit(s);  
Instructor: Kim,Aaron Hyun Sik  
Description: Student may contact the instructor or department for information.

PE 1048 Bowling  
OPT No Aud, 1 credit(s);  
Instructor: Schmid,Michael F  
Description: Fundamentals, including stance, approach and delivery, scoring, bowling terminology, and etiquette. Every student is given personalized instruction on an individual basis each class session. Everyone will learn to throw a hook.

PE 1048 Bowling  
OPT No Aud, 1 credit(s);  
Instructor: Gasior,Lisa J  
Description: Fundamentals, including stance, approach and delivery, scoring, bowling terminology, and etiquette.

PE 1053 Ice Skating  
OPT No Aud, 1 credit(s);  
Instructor: Anderson,Kristina  
Description: Ice Skating is a course intended for students who are looking to learn the skill of ice skating and develop a lifelong activity. Students will be taught the fundamentals of basic ice skating (basic stops, turns, and other skills from both forward and backward positions), be allowed time to practice these skills, with incremental progressions for more advanced students. No experience is necessary before taking the class. Skill progressions/accommodations will be made for skaters of more advanced skating backgrounds.  
Grading: 10% final exam, 90% attendance.

PE 1055 Golf  
OPT No Aud, 1 credit(s);  
Instructor: Ause,Angela Jean  
Description: Proper grip, stance, ball address, swing, club selection, psychological management, rules, and etiquette. Basic instruction in analyzing, assisting with, and coaching golf.

PE 1055 Golf  
OPT No Aud, 1 credit(s);  
Instructor: Peterson,Christopher Jon  
Description: Student may contact the instructor or department for information.

PE 1059 Track and Field  
OPT No Aud, 1 credit(s);  
Instructor: Johnson,Samuel Cory  
Description: Student may contact the instructor or department for information.

PE 1065 Beginning Tumbling and Gymnastics  
OPT No Aud, 1 credit(s);  
Instructor: Eklund,Shelly M  
Description: Rolls, handstands, cartwheels, extensions, handsprings, tucks (flips). Spotting techniques. Skills on bars, vault, and beam.

PE 1067 Basketball  
OPT No Aud, 1 credit(s);  
Instructor: Focke,Alex  
Description: Student may contact the instructor or department for information.
PE 1071 Beginning Cricket  
OPT No Aud, 1 credit(s);  
Instructor: Peterson, Charles E  

PE 1072 Soccer  
OPT No Aud, 1 credit(s);  
Instructor: Adamcsek, Viktor Istvan  
Description: Fundamentals of soccer including sporting behavior both on and off the field, game rules, soccer terminology, participation and competition drills, fundamental soccer skills, practical instruction in strategy.

PE 1074 Beginning Volleyball  
OPT No Aud, 1 credit(s);  
Instructor: Shingles, Kori Elizabeth  
Description: Basic skills, team play, rules, officiating, and strategy.

PE 1074 Beginning Volleyball  
OPT No Aud, 1 credit(s);  
Instructor: Bonikowske, Amanda Rachelle  
Description: Student may contact the instructor or department for information.

PE 1074 Beginning Volleyball  
OPT No Aud, 1 credit(s);  
Instructor: Michels, Heidi Marie  
Description: Student may contact the instructor or department for information.

PE 1076 Flag Football  
OPT No Aud, 1 credit(s);  
Instructor: Medina, Jaime Gerardo  
Description: Student may contact the instructor or department for information.

PE 1077 Lacrosse  
OPT No Aud, 1 credit(s);  
Instructor: Hegghenes, Karen Elizabeth  
Description: Student may contact the instructor or department for information.

PE 1078 Ultimate Disc  
OPT No Aud, 1 credit(s);  
Instructor: Williams, Gregory Donald  
Description: Introduction to ultimate disc, techniques, field positions, rules, regulations. Students participate in vigorous exercise activities including running, throwing, and catching.

PE 1082 Broomball  
OPT No Aud, 1 credit(s);  
Instructor: Johnson, Matthew Lloyd  
Description: Beginning broomball is the perfect course for any student looking to get into a sport that is uniquely Minnesotan, while staying in the warm confines of Ridder Arena. The course will be 85% on ice training. The PAP program will provide helmets, sticks and balls. Other protective equipment is recommended but not required.  
Grading: 30% final exam, 50% attendance, 20% class participation.

PE 1107 Intermediate Swimming  
OPT No Aud, 1 credit(s);  
Instructor: White, Annie  
Description: Student may contact the instructor or department for information.

PE 1174 Intermediate Volleyball
PE 1205 Scuba and Skin Diving
OPT No Aud, 1 credit(s);
Instructor: Karl, Robert J
Description: This course is available to all students and prospective students (through CCE) at the University. The course consists of classroom instruction and practical pool work. SCUBA Certification is not included in the course. The third part necessary for certification (4 open water dives) can be arranged through the instructor at an additional charge. Students may also decide to get a referral letter and take their open water dives at numerous locations around the world. Classroom subjects include the physics and physiology of diving, equipment, decompression, dive planning, emergencies, and the marine environment. Some topics require mandatory attendance. Pool work covers all necessary applications to diving. All students must be comfortable being in the water, and must be able to swim a minimum of 400 yards. Students should plan on attending all class and pool sessions, as quizzes will be administered throughout the course and all pool work is built on previously learned skills. All evening students and all day school students whose classes start on Thursdays, must come to the first class with appropriate swimming attire (i.e. swimming suits). Evening classes have a 2-hr lecture period followed by 2 hrs. of pool work. Day classes have lectures on Tuesdays and pool work on Thursdays. Please check the website http://SuperiorExpeditions.com for forms and notes for requirements and limitations for SCUBA diving. There will be a $118 course fee. Additionally there is a $60 course Kit that needs to be purchased from the instructor the first day of class.
Style: 50% Lecture, 50% Laboratory.
Grading: 33% final exam, 33% quizzes, 33% class participation.
Exam Format: multiple choice

PE 1720 Special Activities in Physical Education: Jump rope techniques and skills
OPT No Aud, 1 credit(s), max credits 9, 9 completions allowed;
Instructor: Galvan, Jessica A
Description: Student may contact the instructor or department for information.

Physical Medicine and Rehabilitation 500 Boynton Health Service (Box 297 Mayo)

PMed 8200 Physical Medicine and Rehabilitation Service
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Dykstra, Dennis Dale
Description: Student may contact the instructor or department for information.

Physical Therapy 382 Children’s Rehabilitation Center

PT 1002 Orientation to Physical Therapy
S-N only, 1 credit(s);
Instructor: Carey, James Robert
Description: This course is an introduction to the profession of Physical Therapy. The course is intended for undergraduate university students who are interested in pursuing Physical Therapy as a career, or who want to learn more about the field of Physical Therapy to assist them in making a career decision.

PT 1002 Orientation to Physical Therapy
S-N only, 1 credit(s);
Instructor: Olson-Kellogg, Becky Jo
Description: This course is an introduction to the profession of Physical Therapy. The course is intended for undergraduate university students who are interested in pursuing Physical Therapy as a career, or who want to learn more about the field of Physical Therapy to assist them in making a career decision.

PT 6002 Ethics in Public Health: Research and Policy
S-N only, 1 credit(s), max credits 2;
Instructor: Quicker, Karen Lee
Description: Student may contact the instructor or department for information.

PT 6213 Clerkship I
A-F only, 2 credit(s);
Instructor: Lojovich, Jeanne Marie
Description: Student may contact the instructor or department for information.

PT 6215 Clerkship III
A-F only, 1 credit(s), max credits 2, 1 completion allowed;
Instructor: Lojovich, Jeanne Marie
Description: Student may contact the instructor or department for information.

PT 6220 Clinic Volunteer
No Grade, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Anderson, Kathleen
Description: Student may contact the instructor or department for information.

PT 6231 Clinical Biomechanics
A-F only, 5 credit(s); Intro calculus, physics, registered PT student
Credit will not be granted if credit has been received for: PMED 5231;
Instructor: Ludewig, Paula M

PT 6280 Clinical Assessment
A-F only, 4 credit(s);
Instructor: Glasoe, Ward M
Description: Student may contact the instructor or department for information.

PT 6281 Scientific Foundations I: Theory of Therapeutic Exercise
A-F only, 3 credit(s); Registered PT student
Credit will not be granted if credit has been received for: RTT 5281;
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

PT 6283 Musculoskeletal I
A-F only, 7 credit(s);
Instructor: Anderson, Kathleen
Description: Student may contact the instructor or department for information.

PT 6293 Essentials of Rehabilitation Research
A-F only, 4 credit(s);
Instructor: Di Fabio, Richard P
Description: Student may contact the instructor or department for information.

PT 6295 Clinical Internship I
S-N only, 10 credit(s);
Instructor: Lojovich, Jeanne Marie
Description: Student may contact the instructor or department for information.

PT 6296 Clinical Internship II
S-N only, 10 credit(s);
Instructor: Lojovich, Jeanne Marie
Description: Student may contact the instructor or department for information.

PT 6340 Human Growth and Development
A-F only, 3 credit(s);
Instructor: Kellogg, Becky
Description: Student may contact the instructor or department for information.

PT 7000 Neurological Theory and Neuroscience in Physical Therapy
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Lojovich, Jeanne Marie  
Description: Student may contact the instructor or department for information.

PT 7009 Capstone Experience  
A-F only, 3 credit(s);  
Instructor: Carey, James Robert  
Description: Student may contact the instructor or department for information.

PT 7010 Topics in Geriatric Rehabilitation I  
S-N only, 2 credit(s);  
Instructor: Olson-Kellogg, Becky Jo  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Carey, James Robert  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Snow MD, PhD, LeAnn M  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Lojovich, Jeanne Marie  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Kimberley, PT, PhD, Teresa Jacobson  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Thompson PhD, LaDora V  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Ludewig, Paula M  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Glasoe, Ward M  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Gillick, Bernadette Therese  
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I  
S-N only, 1 credit(s);  
Instructor: Nuckley PhD, David J  
Description: Student may contact the instructor or department for information.
PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Anderson, Kathleen
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Lojovich, Jeanne Marie
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Thompson PhD, LaDora V
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Lowe, Dawn Annette
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Gillick, Bernadette Therese
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Nuckley PhD, David J
Description: Student may contact the instructor or department for information.

Physics

Phys 1001W Energy and the Environment
4 credit(s); Meets CLE req of Environment; meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course addresses current issues of the relationship between energy use and the environment by starting with the fundamental physics principles of force and energy, and demonstrating how these concepts apply to Electricity and Magnetism, Thermodynamics, Chemical Physics and Nuclear Power generation. These principles are applied to specific applications by examining topics such as power production, acid rain and fuel resources. The consequences of fundamental physics on public policy will also be discussed in this context. Math skills at the level of high school algebra are assumed. The accompanying laboratory is a series of short experiments which illustrate the concepts as they are presented in class.
Phys 1011 Physical World
A-F only, 3 credit(s);
Instructor: Cassola, Robert L
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The underlying purpose of this course is to provide you with a firm, elementary understanding of the principles of physics. The material covered in this course is fundamental and forms the basis for virtually all future courses in physics and engineering. It is hoped that as you proceed through this course, you will not only gain some facility in applying the concepts of physics to problems of practical interest, but that you will also gain an awareness of, and an appreciation for, the unifying principles on which physics is based.
Style: This is a printed correspondence section.
Grading: 40% mid exam, 30% final exam, 30% written homework.
Exam Format: Supervised, in-person exams

Phys 1101W Introductory College Physics I
4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the first part of a course sequence designed to prepare you for work in your field by: having solid conceptual understanding of the way the real world works based on a few fundamental principles of physics; being able to solve realistic problems using logical reasoning and quantitative problem solving skills; applying those physics concepts and problem solving skills to new situations; and learning to effectively communicate technical information. To achieve these goals, this course requires an in depth understanding of the material. Phys 1101W will emphasize the dynamics approach to physics emphasizing the description of motion of interacting objects and the forces that they exert on each other. No previous physics knowledge is assumed, but it is assumed that you are able to do algebra, including solving quadratic and simultaneous equations, interpret simple graphs, basic geometry, especially the geometry of triangles; the use of sine, cosine, and tangent; and the Pythagorean Theorem. A laboratory requires you to apply both the concepts and problem solving skills taught in this course to the real world. It also emphasizes technical communications skills. A discussion section gives you the opportunity to discuss your conceptual understanding and problem solving skills while you practice solving problems with other students. The laboratory and discussions sections emphasize collaborative problem solving as a powerful learning tool and as a preparation for work in your profession.

Phys 1107 Introductory Physics Online I
4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phys 1107 Introductory Physics Online I
4 credit(s);
Instructor: Border, Pete Mac
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. Physics 1107 is an online, algebra-based course covering Newtonian mechanics. Its topics are kinematics, dynamics, forces, mechanical energy, momentum, rotational kinematics, and rotational dynamics. Each lesson contains a laboratory exercise to be performed at home. Labs are supplemented by online, interactive simulations. Problem-solving is fundamental to Physics 1107, both as a way to learn the concepts of physics and as a skill in itself. You will solve problems on your own and in small online groups, including weekly live chat sessions for questions and help.
Style: Online with handwritten exams
Grading: 20% mid exam, 20% final exam. -12 sets of textbook problems (35%) -13 pre-lab prediction and method questions (5%) -13 labs, including data analysis activities (5%) -6 lab reports (15%)
Exam Format: Supervised, in-person (not online) midterm and final exams.

Phys 1201W Introductory Physics for Biology and Pre-medicine I
5 credit(s); [High school or college calculus], trigonometry, algebra
Credit will not be granted if credit has been received for PHYS 1301W; Meets CLE req of Physical Sciences; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the first semester of a 2 semester course designed primarily for students majoring in the biological sciences or preparing for medical school. This is not a survey course of all physics but requires an in-depth understanding of fundamental principles and their application. A course in calculus equivalent to Math 1271, 1371 or 1241 taken previously or simultaneously is required. Students should have a working knowledge of derivatives as well as algebra and the geometry of right triangles. The course emphasizes an understanding of the fundamental principles of physics and their use in solving realistic quantitative problems of the type found in biological applications. The first semester develops the concepts of forces and conservation principles to determine the
behavior of a system. The importance of energy transfer between objects in a system and between systems will be emphasized, especially within the framework of thermodynamics. A required laboratory illustrates the application of the concepts and problem solving skills taught in this course to the real world. It will also emphasize technical communications skills. A discussion section gives the opportunity to discuss your conceptual understanding and your problem solving skills by practicing working problems with other students. The laboratory and discussions sections will emphasize collaborative problem solving as a powerful learning tool and as a preparation for work in your profession.

Phys 1202W Introductory Physics for Biology and Pre-medicine II
5 credit(s); 1201W Credit will not be granted if credit has been received for: PHYS 1302W; Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the second semester of a two-semester course in introductory physics designed primarily for premed and biological science students. This is not a survey course of all physics but requires an in-depth understanding of fundamental principles and their application. Students should have a working knowledge of the mathematics skills used in Phys1201W. This semester will cover electricity and magnetism, light and optics, quantum description of atoms and nuclei, and relativity. A required laboratory illustrates the application of the concepts and problem solving skills taught in this course to the real world. It will also emphasize technical communications skills. A discussion section gives the opportunity to discuss your conceptual understanding and your problem solving skills by practicing working problems with other students. The laboratory and discussions sections will emphasize collaborative problem solving as a powerful learning tool and as a preparation for work in your profession.

Phys 1251 Physics I
A-F only, 4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Technology and Society
Instructor: Aryal, Bijaya
Description: Student may contact the instructor or department for information.

Phys 1251 Physics I
A-F only, 4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Technology and Society
Instructor: Aanerud, Marian Elaine Melby
Description: Student may contact the instructor or department for information.

Phys 1301W Introductory Physics for Science and Engineering I
4 credit(s); Concurrent registration is required (or allowed) in Math 1271 or Concurrent registration is required (or allowed) in Math 1371 or Concurrent registration is required (or allowed) in Math 1571 Credit will not be granted if credit has been received for: PHYS 1201W; Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the first of a three semester introductory course in physics for students in sciences and engineering. 1301W/1302W, 2303 or 2503 is designed to prepare you for work in your field by: building a solid conceptual understanding of fundamental principles of physics, and their applications; applying those principles to new situations, using logical reasoning and quantitative problem-solving skills; learning to communicate technical information effectively. To achieve these goals, this course requires you to understand the material in depth. 1301W will emphasize the study of mechanical systems, beginning with the description of motion of interacting objects, the forces that they exert on each other and the quantities that are conserved in those interactions. A laboratory is included to allow you to apply physical principles to the real world in a carefully controlled environment, and will also emphasize technical communications skills. A discussion section will give you the opportunity to clarify your conceptual understanding, and practice your problem-solving skills, by practicing working problems with other students. This is a calculus-based course, and students will be expected to use the basic concepts of differential and integral calculus, as well as algebra and trigonometry.

Phys 1302W Introductory Physics for Science and Engineering II
4 credit(s); 1301W, Concurrent registration is required (or allowed) in Math 1272 or Math 1372 or Math 1572 Credit will not be granted if credit has been received for: PHYS 1202W; Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the 2nd of a 3 semester intro course in physics for students in science and engineering. 1302W emphasizes the application of the physical principles learned in 1301W to electrical and magnetic interactions. The course is designed to prepare you for work in your field by: having solid conceptual understanding of the way the real world works based on a few fundamental principles of physics; being able to solve realistic problems using logical reasoning and quantitative problem solving skills; applying those physics concepts and problem solving skills to new situations; and learning to effectively communicate technical information. To achieve these goals, this course requires you to understand the material in depth. Emphasis will be given to the application of physics principles to real-life situations, and will use problems designed to simulate such situations. This course assumes a good working knowledge of the concepts and skills in 1301W. Because of the nature of this material, this course will be more abstract and mathematical than 1301W.
A lab is included to allow you to apply both the concepts and problem solving skills to the real world. It will also emphasize technical communications skills. A discussion section will give you the opportunity to discuss your conceptual understanding and practice your problem solving skills with other students.

**Phys 1401V Honors Physics I**

A-F only, 4 credit(s); honors student and permission of University Honors Program
Credit will not be granted if credit has been received for: PHYS 1201W
Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the first of a three semester introductory course in physics for students in the IT Honors Program. It is designed to prepare you for work in your field by: having a solid conceptual understanding of the way the real world works based on a few fundamental principles of physics; being able to solve realistic problems using logical reasoning and quantitative problem solving skills; applying those physics concepts and problem solving skills to new situations; and learning to effectively communicate technical information. This course requires you to understand the material in depth; it will go at a faster pace than Physics 1301W and at a higher mathematical level. The emphasis will always be on the application of physics principles to interesting situations, and problems will be designed to simulate such situations. 1401V will emphasize the application of physics to mechanical systems beginning with the description of motion of interacting objects and the forces that they exert on each other. Conservation ideas will also be used to describe the effect of the interaction on systems of objects. These fundamental ideas will be applied to complex systems such as continuous material, fluids, and gasses. This course assumes a background equivalent to high school physics and familiarity with calculus. Students should have the ability and desire to use mathematics not yet introduced in math class. A laboratory is included to allow you to apply physical principles to the real world in a carefully controlled environment, and will also emphasize technical communications skills. A discussion section will give you the opportunity to clarify your conceptual understanding, and practice your problem-solving skills, by practicing working problems with other students.

**Phys 1905 Freshman Seminar**

A-F only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

**Phys 1905 Freshman Seminar: The Physics of Superheroes**

A-F only, 2 credit(s), max credits 6;
Instructor: Kakalios, James
Description: The Physics of Superheroes. This seminar class will discuss basic principles of physics and chemistry as illustrated by their correct application in comic books. Superhero comic books get their science right more often than you might think! We will discuss how large the gravity on Krypton must have been in order to enable someone on Earth to leap tall buildings in a single bound. The principle of conservation of energy will be illustrated by considering the super speedster, the Flash. Are any of the X-Men’s powers realistic? Plausible? Possible? And why can’t Superman change history when he travels through time? After you learn what would really happen if you were bitten by a radioactive spider, you’ll want to sleep with the lights on! Math Level: High School Algebra and Geometry.

**Phys 1905 Freshman Seminar: What Is Everything Made Of?**

A-F only, 2 credit(s), max credits 6;
Instructor: Heller, Ken
Description: What is Everything Made Of? We all know that the everyday objects around us are made of atoms. The atoms are themselves made of electrons and a nucleus with lots of space in between. The nuclei are made of protons and neutrons. But what are the protons, neutrons, and electrons made of? Does this chain of smaller and smaller bits of matter go on forever? What about space? Is it really empty, or is it made of something? There are less common objects in our Universe: neutrinos, black holes, antimatter. Are they made of the same stuff as a chair? This seminar will allow you to investigate the latest results, theories, and speculations from the frontiers of physics in a qualitative manner. Math Level: High School Algebra

**Phys 1905 Freshman Seminar: Science, Pseudoscience, or Fraudulent Science?**

A-F only, 2 credit(s), max credits 6;
Instructor: Campbell, Charles E
Description: Science, Pseudoscience, or Fraudulent Science? In this seminar we examine the history of several scientific discoveries, notorious or noteworthy, and the controversies surrounding them, including the demonstration of fraud in some cases and their vindication in others. We address the question of how and to what extent the informed public and public policy-makers can ascertain the validity of scientific claims, and examples of consequences of a failure to do so. Examples include cold fusion, magnetic therapy, zero point energy, and high temperature superconductivity.

**Phys 1905 Freshman Seminar: How Things Work**
A-F only, 2 credit(s), max credits 6;
Instructor: Dahlberg,E Dan
Description: How Things Work. This seminar will develop an understanding of how many devices in our high technology society work including engines, motors, thermometers, and cameras. There will also be a series of simple technological devices the students will construct during the semester to explore the engineering process of taking physics into technology. These engineering projects may include building an electromagnet, electric motor, a mouse trap powered toy car, an egg saver (when dropped from a considerable height), and a match head rocket. In addition to the construction projects, at the end of the semester each student will make a short presentation on something they have taken apart to explore and understand.

Phys 1910W Freshman Seminar: Writing Intensive
A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phys 1910W Freshman Seminar: Writing Intensive: What is Time?
A-F only, 2 credit(s), max credits 3, 1 completion allowed;Meets CLE req of Writing Intensive
Instructor: Halley,J Woods
Description: What is Time? The precise meaning and use of the concept of time has evoked serious study and debate among the most able of human thinkers for more than two thousand years. We will review several of the current perspectives as well as some of this history of the concept of time from the points of view of philosophers, biologists, psychologists and physicists.

Phys 2201 Introductory Thermodynamics and Statistical Physics
3 credit(s);
Instructor: STAFF
Description: Introduction to thermodynamics, including its underlying statistical nature. Topics will include Kinetic Theory, Thermodynamics, Phase Transitions, and Boltzmann statistics. Applications explored will include the behavior of gases and the operation of heat engines.
Exam Format: Quantitative and qualitative problems

Phys 2251 Physics II
A-F only, 4 credit(s);Meets CLE req of Physical Sciences
Instructor: Aryal,Bijaya
Description: Student may contact the instructor or department for information.

Phys 2311 Modern Physics
4 credit(s);
Instructor: Cassola,Robert L
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The purpose of this course is to acquaint you with some of the principles by which the physical world operates, and to enable you to apply these principles to a number of different situations. It is hoped that, without a great deal of mathematical complexity, you will be able to see how these general principles extend to other fields. This course will stress being able to do things - simple problems, numerical estimates, and prediction of events. These skills only come with practice, so that, necessarily, this course is built around working problems.
Style: This is a printed correspondence section.
Grading: 40% mid exam, 40% final exam, 20% written homework. S/N students must earn at least 70 percent to receive a grade of S.
Exam Format: Supervised, in-person exams

Phys 2403H Honors Physics III
A-F only, 4 credit(s);1402V, honors student and permission of University Honors ProgramCredit will not be granted if credit has been received for: PHYS 2303;
Instructor: STAFF
Description: This is the conclusion of a three semester introductory course in physics for students in the IT Honors program. It is designed to prepare you for work in your field by: having solid conceptual understanding of the way the real world works based on a few fundamental principles of physics; being able to solve realistic problems using logical reasoning and quantitative problem solving skills; applying those physics concepts and problem solving skills to new situations; and learning to effectively communicate technical information. The pace is faster than Physics 2503 and at a higher mathematical level. The emphasis will always be on the application of physics principles to interesting situations, and the problems will be designed to simulate such situations. 2403H will emphasize the applications of physics that have been important in the 20th century, including electromagnetic waves, optics, special relativity and...
quantum theory. This course assumes a good working knowledge of the concepts and skills in 1402V. A discussion section will give you the opportunity to discuss your conceptual understanding and practice your problem solving skills.

Phys 2503 Physics III: Intro to Waves, Optics, and Special Relativity
4 credit(s); 1302W, [MATH 1272 or MATH 1372 or MATH 1572H] Credit will not be granted if credit has been received for: PHYS 2303;
Instructor: STAFF
Description: This is the third semester of a 4-semester introductory course in physics for students in sciences and engineering which began with Physics 1301W/1302W and is completed by Physics 2601 in the following semester. The topics include: mechanical and electromagnetic waves, optics, and special relativity. Thermodynamics is covered at the sophomore level in the 3-credit Physics 2201 course, and is therefore not included in 2503. This course is recommended for physics majors, aero-engineering students, and anybody who plans to take Phys 2601 as their introduction to quantum physics. Students who plan to take only 3 semesters of physics, should take Physics 2303.

Phys 3071W Laboratory-Based Physics for Teachers
4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course is intended to provide an experience based introduction to a selection of fundamental physics concepts especially chosen to be useful for potential elementary school teachers. These fundamental concepts include the interaction between objects and the description of that interaction by energy, forces, and fields. These ideas will be applied to electricity and magnetism as well as optics and heat. The course is activity-based and collaboration-oriented with four major goals: (1) to help you construct a set of physics ideas that you can apply to explain phenomena that are intrinsically interesting at a level appropriate to an elementary school science curriculum; (2) to help you understand the process of doing science; (3) to give you practice and confidence in doing science, and (4) to link the development of the course material to your own learning. The teaching and learning strategies used in this course will be valuable and appropriate for use in your teaching career. No specific background in science or mathematics is assumed in this course.

Phys 3993 Directed Studies
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed study in Physics in areas arranged by the student and a faculty member.

Phys 3994 Directed Research
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed research in physics in areas arranged by the student and a faculty member.

Phys 4001 Analytical Mechanics
4 credit(s);
Instructor: STAFF
Description: The course emphasizes a mathematically sophisticated reformulation of Newtonian mechanics. This course develops the skills of solving the difficult problems that arise in complex mechanical systems using advanced mathematical techniques. Applications include oscillators, orbital dynamics, and rigid body dynamics. This course serves as an introduction to the Lagrangian formulation of dynamics. Mathematics beyond the prerequisite mathematics courses are developed as required. The knowledge of physics learned in Physics 2303, 2403, or 2503 is assumed. A discussion section will give you the opportunity to discuss your conceptual understanding and practice your problem solving skills in collaboration with other students.

Phys 4041 Computational Methods in the Physical Sciences
4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phys 4051 Methods of Experimental Physics I
5 credit(s);
Instructor: STAFF
Description: This course is the first of a two semester sequence on the techniques used in a modern physics laboratory. Most of the work will be done in a laboratory. In this semester you will gain experience using analog and digital electronics by building various circuits that are in wide-spread use. You will also learn about acquiring signals and interfacing them to a computer. Basic familiarity with computers is assumed. Programming languages such as C++ will be used and skill in using them can be gained either through
independent study during the course or from previous experience. Emphasis is also given to refining the techniques of writing scientific 
research reports suitable for publication. The course is designed for science and engineering students who have successfully 
completed Physics 2605 or the equivalent and assumes the knowledge and skills developed in that course. This course is an excellent 
introduction to modern laboratory techniques for upper division and graduate students in various scientific or technological fields. It is a 
required class for Physics and Astrophysics Majors.

Phys 4101 Quantum Mechanics
4 credit(s);
Instructor: STAFF
Description: This course in quantum mechanics will focus on using the Schrodinger Equation to predict the behavior of atomic and 
subatomic systems. The knowledge and skills learned in Physics 2601 are assumed. Mathematics beyond the prerequisite 
mathematics courses are developed as required. Topics addressed include the behavior of systems with a potential to predict the 
decay and scattering of particles, quantized angular momentum and its relationship to spin, the energy states of atoms, and the 
properties of materials. The course will introduce approximation methods such as Perturbation Theory and the Variational Technique. 
A discussion section will give you the opportunity to discuss your conceptual understanding and practice your problem solving skills in 
collaboration with other students.

Phys 4201 Statistical and Thermal Physics
3 credit(s);
Instructor: STAFF
Description: This course is an introduction to the statistical nature of the behavior of matter both from the classical and quantum point 
of view. The knowledge and skills learned in Physics 2303, 2403H, or 2503 as well as those from Physics 2601 are assumed. 
Mathematics beyond the prerequisite mathematics courses are developed as required. Topics addressed include: the enumeration of 
states both classically and quantum mechanically, entropy and free energy, partition functions, phase transitions, and the 
behavior of gasses and solids.

Phys 4303 Electrodynamics and Waves
3 credit(s);
Instructor: STAFF
Description: The third semester of the upper division 4001-4002 physics sequence covers electrodynamics and wave phenomena. 
The topics include electromagnetic waves in vacuum and in matter, radiating systems and diffraction, wave guides, interference 
phenomena, polarization and birefringence, optical properties of materials, non-linear optics, waves in elastic media and fluids, and 
acoustics.

Phys 4501 Experimental Project
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: STAFF
Description: This course is an independent experimental project designed by a student in collaboration with a faculty member.

Phys 4950H Senior Thesis
S-N only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Independent project with adviser.

Phys 4993 Directed Studies
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed study in Physics in areas arranged by the student and a faculty member.

Phys 4994 Directed Research
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed research in physics in areas arranged by the student and a faculty member.

Phys 5001 Quantum Mechanics I
4 credit(s);
Instructor: STAFF
Description: Part I of a year-long course sequence in quantum mechanics for first-year graduate students in physics and other fields.
Familiarity with quantum mechanics at the level of an upper division undergraduate physics course in the subject, such as Physics 4101, will be assumed. The course will include such topics as the Schrödinger Equation and the general formalism of quantum mechanics, bound state and scattering problems in one and three dimensions, angular momentum, the hydrogen atom, approximation methods in stationary and time dependent problems, and the interaction of electromagnetic radiation with atoms.

**Phys 5011 Classical Physics I**
4 credit(s);
Instructor: STAFF
Description: This is the first semester in a year sequence of Classical Physics, intended primarily for first-year graduate students. Preparation at the level of Phys 4001-4002 is assumed. Classical Mechanics, including Lagrange's approach to various physics problems, relativity, and and nonlinear phenomena are covered in the fall semester.
Style: 80% Lecture, 20% Discussion.
Grading: 33% final exam, 32% quizzes, 35% problem solving.
Exam Format: problem solving

**Phys 5022 Relativity, Cosmology, and the Universe**
4 credit(s); 2601 or instr consent
Credit will not be granted if credit has been received for: AST 5022;
Instructor: STAFF
Description: In this course, we will explore the evolution of the Universe from the beginning to the present day, and will cover the standard theory and observations as well as the latest developments in cosmology. Specific topics include: the global geometry and dynamics, inflation, baryogenesis, big bang nucleosynthesis, cosmic microwave background radiation, gravitational instability and structure formation. The course is intended for graduates and upper-level astronomy and physics undergraduates.

**Phys 5041 Mathematical Methods for Physics**
4 credit(s);
Instructor: STAFF
Description: The course introduces students to some of the more advanced mathematical methods most widely used in physics. The emphasis is on the analytical methods and their computational implementation using symbolic calculations software, such as Mathematica. Basic numerical methods are presented with the emphasis on the ways to evaluate their accuracy and effectiveness. Major topics to be covered include complex analysis, Fourier transforms, probabilities, and asymptotics. An additional goal of the course is to expose the students to the use of mathematics in contemporary physics research.
Style: 90% Lecture, 10% Discussion.
Grading: 25% mid exam, 25% final exam, 50% problem solving.
Exam Format: Problem solving

**Phys 5072 Best Practices in College Physics Teaching**
1-3 credit(s), max credits 5, 3 completions allowed;
Instructor: STAFF
Description: Teaching assistant seminar covering pedagogy for introductory physics classes. Topics from educational research and practice as applied to classroom.

**Phys 5201 Thermal and Statistical Physics**
A-F only, 3 credit(s);
Instructor: STAFF
Description: Principles of thermodynamics and statistical mechanics. Selected applications such as kinetic theory, transport theory, and phase transitions.

**Phys 5950 Colloquium Seminar**
S-N only, 1 credit(s);
Instructor: STAFF
Description: Colloquium of School of Physics and Astronomy.

**Phys 5970 Physics Journal Club**
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: Weekly presentation, discussion, and critical analysis of important papers led by students.

**Phys 5980 Introduction to Research Seminar**
Phys 5993 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: STAFF
Description: Directed study in Physics in areas arranged by the student and a faculty member.

Phys 5994 Directed Research
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: STAFF
Description: Directed research in physics in areas arranged by the student and a faculty member.

Phys 8001 Advanced Quantum Mechanics
3 credit(s);
Instructor: STAFF
Description: Topics in non-relativistic quantum mechanics; second quantization. Introduction to Diagrammatic and Green's function techniques and to relativistic wave equations. Application of relativistic perturbation theory to particle interactions with electromagnetic field. Invariant interactions of elementary particles.

Phys 8012 Quantum Field Theory II
3 credit(s);
Instructor: STAFF
Description: Aspects of general theory of quantized fields, including space-time and discrete transformation properties, the CPT theorem, and the spin-statistics connection. Introduction to functional and path-integral methods. Renormalization group and asymptotic freedom. Semi-classical methods and instantons in gauge theories.

Phys 8200 Seminar: Cosmology and High Energy Astrophysics
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Current topics in cosmology and high energy astrophysics.

Phys 8500 Plan B Project
4 credit(s);
Instructor: STAFF
Description: Project topic arranged between student and instructor. Written report required.

Phys 8600 Seminar: Space Physics
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Current topics in space physics and plasma physics.

Phys 8700 Seminar: Condensed Matter Physics
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Students enrolled for 8700 must attend the Condensed Matter Seminar on Thursdays at 1:25pm and the Condensed Matter Sack Lunch Seminar on Tuesdays at 12:20pm every week. In addition, students registering must present a Tuesday Sack Lunch for each registration. If a student enrolls for 8700 twice in one academic year then one of the two required presentations can be presented in the following academic year.

Phys 8711 Solid-State Physics I
3 credit(s);
Instructor: STAFF

Phys 8800 Seminar: Nuclear Physics
Phys 8802 Nuclear Physics II

3 credit(s);
Instructor: STAFF
Description: Properties of nuclei based on hadronic and quark-gluon degrees of freedom. Relativistic field theory at finite temperatures and density applied to many-body problems, especially nuclear matter and quark-gluon plasma. Applications to lepton and hadron scattering, nucleus-nucleus collisions, astrophysics and cosmology.

Phys 8900 Seminar: Elementary Particle Physics

S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Seminars on topics in elementary particle physics, high energy physics, particle astrophysics and cosmology.

Phys 8901 Elementary Particle Physics I

3 credit(s);
Instructor: STAFF

Phys 8994 Research in Physics

1-12 credit(s), max credits 24, 24 completions allowed;
Instructor: STAFF
Description: Research under faculty direction.

Physiology 6-125 Jackson Hall

Phsl 3051 Human Physiology

4 credit(s);[BIOL 1009 or 1 yr college biol], 1 yr college chemCredit will not be granted if credit has been received for: PHSL 3050;
Instructor: Anderson PhD,Lisa Carney
Description: Human Physiology is a 4 credit class designed for science majors and pre-allied health sciences majors. This course covers basic science principles of cell transport, cell signaling and major organ systems (nerve, muscle, circulation, respiration, endocrine, renal, gastrointestinal, energy metabolism). Preparation in basic chemistry (two semesters) and biology (one semester) is strongly recommended. Three lecture sessions and one two-hour lab per week. See the following url for a sample syllabus: http://physiology.med.umn.edu/courses/phsl3051/Syllabus.3051.general.info.pdf NOTE: Students who need physiology but do not require a lab may be interested in Phsl 3050 Physiology Cells to Systems. This course has a majority of the same learning outcomes but has no lab component. Phsl is offered summer semester. See our department website for more information about registration. http://physiology.med.umn.edu/courses/phsl3051/3051Registration.html
Style: 70% Lecture, 5% Film/Video, 10% Laboratory, 5% Small Group Activities, 10% Demonstration. Three hours of lecture per week will time for small group activities. Two hours of lab per week with a combination of videos, hands on labs, demonstrations, and critical thinking exercises.
Grading: 60% mid exam, 25% final exam, 10% laboratory evaluation, 5% problem solving. 3 exams worth 20% each. A cumulative final exam worth 25% and lab work worth 10% and critical thinking exercises worth 5%. A 5 point extra credit project can be done for lab.
Exam Format: Multiple choice questions

Phsl 3061 Principles of Physiology

4 credit(s);
Instructor: Anderson PhD,Lisa Carney
Description: Student may contact the instructor or department for information.

Phsl 3062W Research Paper for Physiology Majors

A-F only, 1 credit(s);Meets CLE req of Writing Intensive
Instructor: Barnett, Vincent A
Students will: 1) select a topic in physiological research, 2) read and analyze recent research papers in their topic area a) examine the hypotheses, methods results and discussion sections of the research papers 3) Organize the information and prepare a term paper on their topic using information extracted from the research works. All students work with a faculty reader who provides advice and analysis as the term paper is constructed. The class meets for the first 5-6 of the semester before switching to an independent study format.

**Grading:** Grading is based on the term paper

**Phsl 3095 Problems in Physiology**
- 1-5 credit(s), max credits 20, 20 completions allowed;
- **Instructor:** Barnett, Vincent A
- **Description:** Directed Study - Individualized study in physiology. Students address a selected problem in physiology through library or lab research, supervised by physiology faculty. The instructor listed is the Director of Undergraduate Studies in Physiology (DUS). The DUS can help you set up your research experience, but your research mentor can be drawn from the breadth of U of M faculty doing physiology based research.

**Phsl 3701 Physiology Laboratory**
- A-F only, 2 credit(s); Physiology major
- **Credit will not be granted if credit has been received for:** BMEN 3701;
- **Instructor:** Iaizzo PhD, Paul Anthony
- **Description:** Student may contact the instructor or department for information.

**Phsl 4095H Honors Problems in Physiology**
- A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
- **Instructor:** Barnett, Vincent A
- **Description:** Honors Directed Research - Students pursue a selected topic in physiology through library or lab research supervised by physiology faculty. The instructor listed is the Honors Representative for the Physiology major. The Honors Representative will help you set up your research experience, but your research mentor can be drawn from the breadth of U of M faculty doing physiology based research.

**Phsl 4700 Cell Physiology**
- A-F only, 3 credit(s);
- **Instructor:** Palmer PhD, Melissa L
- **Description:** Student may contact the instructor or department for information.

**Phsl 4900 Advanced Physiology Teaching Laboratory**
- A-F only, 1-6 credit(s), max credits 12;
- **Instructor:** Anderson PhD, Lisa Carney
- **Description:** Advanced Physiology Laboratory is a teaching course for student teaching assistants staffing course offerings in the Department of Integrative Biology and Physiology. Student teaching assistants are required to attend a weekly lab meeting where learning objectives, learning activities and classroom assessments are discussed. Student teaching assistants are required to staff one physiology laboratory per week. Laboratory activities include proctoring quizzes, grading assignments and assisting groups of 30-40 physiology students perform lab experiments. Student teaching assistants must have received a grade of B or better in either Phsl 3051 or Phsl 3061 and must meet in person with the course director prior to registration. Contact Lisa Carney Anderson at ander350@umn.edu for more information.
- **Style:** 50% Discussion, 50% Laboratory. Each week Students will spend 1-2 hours in preparation, 1 hour in lab meeting, 2 hours staffing a lab and 2-3 hours grading
- **Grading:** 50% of grade is based on preparation for meetings and laboratory 50% of grade is based on teaching performance in laboratory setting.

**Phsl 5061 Principles of Physiology for Biomedical Engineering**
- 4 credit(s);
- **Instructor:** Anderson PhD, Lisa Carney
- **Description:** Student may contact the instructor or department for information.

**Phsl 5094 Research in Physiology**
- 1-5 credit(s), max credits 20, 20 completions allowed;
- **Instructor:** Barnett, Vincent A
- **Description:** Directed Study - Independent lab research project in physiology, supervised by physiology faculty. The instructor listed is the Director of Undergraduate Studies in Physiology (DUS). The DUS can help you set up your research experience, but your research mentor can be drawn from the breadth of U of M faculty doing physiology based research.
Phsl 5094 Research in Physiology
1-5 credit(s), max credits 20, 20 completions allowed;
Instructor: Katz, Stephen A.
Description: Student may contact the instructor or department for information.

Phsl 5095 Problems in Physiology
1-5 credit(s), max credits 20, 20 completions allowed;
Instructor: Katz, Stephen A.
Description: Student may contact the instructor or department for information.

Phsl 5096 Integrative Biology and Physiology Research Advances
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Osborn Jr, John W
Description: Student may contact the instructor or department for information.

Phsl 5115 Clinical Physiology I
A-F only, 3 credit(s);
Instructor: Anderson PhD, Lisa Carney
Description: Student may contact the instructor or department for information.

Phsl 5201 Computational Neuroscience I: Membranes and Channels
3 credit(s); calculus through differential equations; Credit will not be granted if credit has been received for: NSC 5201;
Instructor: Miller, Robert F
Description: Student may contact the instructor or department for information.

Phsl 5700 Cell Physiology
A-F only, 4 credit(s);
Instructor: Palmer PhD, Melissa L
Description: Student may contact the instructor or department for information.

Phsl 5701 Physiology Laboratory
A-F only, 1-2 credit(s), max credits 2;
Instructor: Katz, Stephen A.
Description: Student may contact the instructor or department for information.

Phsl 8216 Selected Topics in Autonomic and Neuroendocrine Regulation
S-N only, 1 credit(s);
Instructor: Engeland, William C
Description: Student may contact the instructor or department for information.

Phsl 8222 Central Regulation of Autonomic Function
A-F only, 3 credit(s);
Instructor: Engeland, William C
Description: Student may contact the instructor or department for information.

Plant Biological Sciences

PBS 8081 Integrative Plant Biology: Connecting Molecules to Ecosystems
A-F only, 3 credit(s);
Instructor: Tong, Cindy Bow San
Description: Student may contact the instructor or department for information.

PBS 8900 Seminar
S-N only, 1-2 credit(s), max credits 4, 4 completions allowed;
Instructor: Ni, Min
Description: Student may contact the instructor or department for information.
PBS 8900 Seminar
  S-N only, 1-2 credit(s), max credits 4, 4 completions allowed;
  Instructor: Katagiri,Fumiaki
  Description: Student may contact the instructor or department for information.

PBS 8901 Preparation of Research Proposals
  S-N only, 1 credit(s);
  Instructor: Ni,Min
  Description: Student may contact the instructor or department for information.

PBS 8994 Research
  1-5 credit(s), max credits 10, 10 completions allowed;
  Instructor: Weiblen,George D
  Description: Student may contact the instructor or department for information.

Plant Biology  220 Biological Sciences Center

PBio 4321 Minnesota Flora
  3 credit(s);
  Instructor: Weiblen,Donovan George
  Description: Student may contact the instructor or department for information.

PBio 4321 Minnesota Flora
  3 credit(s);
  Instructor: Weiblen,George D
  Description: This course teaches practical skills for identifying plant species and surveying the ecology of Minnesota vegetation to students of biology, environmental sciences, resource management, horticulture, and beyond. The course integrates botany, ecology, evolution, earth history, climate, and global change in the context of local plant communities. Labs and field trips explore Minnesota plants and plant communities through a combination of web-enhanced digital technology and classical botany. Exercises cover how to (1) identify plant species and describe communities, (2) conduct field surveys of Minnesota vegetation, (3) collect data and preserve botanical specimens, and (4) develop digital resources for Minnesota flora.
  Style: 10% Lecture, 5% Discussion, 20% Laboratory, 20% Small Group Activities, 5% Student Presentation, 10% Demonstration, 20% Field Trips, 10% Web Based. Students are also expected to attend either two Saturday field trips, a weekend overnight field trip, or a special arrangement with the instructor in the event that other weekend commitments conflict with scheduled field trips.
  Grading: 15% mid exam, 20% final exam, 20% special projects, 5% class participation, 20% laboratory evaluation, 20% other evaluation. Other Evaluation - 20% final lab exam
  Exam Format: short answer, lab practical

PBio 4793W Directed Studies: Writing Intensive
  S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;Meets CLE req of Writing Intensive
  Instructor: STAFF
  Description:

PBio 4794W Directed Research: Writing Intensive
  S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;Meets CLE req of Writing Intensive
  Instructor: STAFF
  Description:

PBio 4993 Directed Studies
  S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
  Instructor: STAFF
  Description: Contract between student and advisor required, plus department approval. Credits arranged.
PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Olszewski, Neil E
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Weiblen, George D
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gleason, Florence K
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Springer, Nathan Michael
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Mc Laughlin, David J
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Lefebvre, Paul A
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Marks, M David
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Biesboer, David D.
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gant, Steve
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Wick, Susan M
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Brambly, Robert Morgan
Description: Student may contact the instructor or department for information.
PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Silflow, Carolyn D.
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Ni, Min
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Ward, John M
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: VandenBosch, Kathryn A
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gray, William M
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Tiffin, Peter L
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Gibson, Sue
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Glazebrook, Jane
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Katagiri, Fumiaki
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Moeller, David
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Schmitt, Imke
Description: Student may contact the instructor or department for information.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Hegeman, Adrian D
Description: Student may contact the instructor or department for information.
PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Liboure,Gigor
Description: Student may contact the instructor or department for information.

PBio 5301 Plant Genomics
3 credit(s);[Intro course in genetics, intro course in biochemistry] or instr consent Credit will not be granted if credit has been received for: PLPA 5301;
Instructor: Young,Nevin Dale
Description: Plant genomics is a class intended for graduate and advanced undergraduate students who are interested in recent discoveries in genomics and bioinformatics applied to the study of plants. Students learn strategies for structural and functional genomics by exploring the genomes of model plant systems, comparative genomics, evolution of gene families, genome expression and genome restructuring. Students develop basic understand about the fundamentals of sequence analysis, database searching and data-mining through computer labs and independent projects. Most class sessions consist of lectures, discussions, and small group activities. Prerequisites are an introductory course in genetics and either cell biology or biochemistry -- or -- consent of instructor.
Style: 60% Lecture, 20% Discussion, 20% Laboratory. Frequent small group activities and computer labs
Grading: 30% mid exam, 30% final exam, 15% special projects, 15% written homework, 10% class participation.
Exam Format: Approximately 10 short answer question plus one or two longer essay-type questions.

PBio 5412 Plant Physiology
3 credit(s);
Instructor: Gantt,Steve
Description: Plant Physiology 5412 is designed for advanced undergraduates and first year graduate students. The course is focused on physiological processes that are specific to plants. A background understanding of genetics and biochemistry is expected. Topics include mechanisms of plant water relations, vascular transport in the xylem and phloem, photosynthesis and respiration, responses to environmental stimuli such as drought, plant mineral nutrition and membrane transport, cell wall structure, plant growth and development including responses to light and hormones. Grades are based on four non-cumulative exams including the final exam.
Style: 100% Lecture.
Grading: 25% mid exam, 25% final exam, 50% other evaluation. two additional exams during the semester
Exam Format: Mostly short answer, some multiple choice, some problems solving.

PBio 5412 Plant Physiology
3 credit(s);
Instructor: Ni,Min
Description: Plant Physiology 5412 is designed for advanced undergraduates and first year graduate students. The course is focused on physiological processes that are specific to plants. A background understanding of genetics and biochemistry is expected. Topics include mechanisms of plant water relations, vascular transport in the xylem and phloem, photosynthesis and respiration, responses to environmental stimuli such as drought, plant mineral nutrition and membrane transport, cell wall structure, plant growth and development including responses to light and hormones. Grades are based on four non-cumulative exams including the final exam.
Style: 100% Lecture.
Grading: 25% mid exam, 25% final exam, 50% other evaluation. two additional exams during the semester
Exam Format: Mostly short answer, some multiple choice, some problems solving.

PBio 5960 Special Topics
S-N only, 1 credit(s), max credits 18, 6 completions allowed;
Instructor: Gibson,Sue
Description: Student may contact the instructor or department for information.

PBio 5960 Special Topics
S-N only, 1-3 credit(s), max credits 18, 6 completions allowed;
Instructor: Katagiri,Fumiaki
Description: Student may contact the instructor or department for information.

Plant Pathology 495 Borlaug Hall

PIPa 1005 Plants Get Sick Too
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Kurle PhD,James E.
Description: This course is an introductory survey of plant pathology presented in lectures, on the web, and in the laboratory. It meets the criteria for a Biological Sciences Core presented by the Council of Liberal Education through both lecture and laboratory exercises. The course uses examples drawn from plant pathology to develop an understanding of general biological concepts, such as biological nomenclature, taxonomic rank and organization, ecological roles, natural selection and evolution, diversity, and physiology and primary metabolism. The student will develop a general understanding of: 1) the concepts and terminology used to describe and understand plant disease, 2) the major groups of plant pathogens, 3) the interaction of host and pathogen biology, crop ecology, and control measures with plant disease development, and 4) the role of plant disease in human affairs. Selected viruses, bacteria, fungi, nematodes that are pathogens of plants grown in Minnesota will be used to illustrate concepts presented in lectures. This material is integrated with materials and exercises presented in the laboratory. Supplementary readings will be available on library reserve. Particular emphasis is placed on the importance of plant diseases to human welfare and in human history. Course Objectives: Students will: 1) Become familiar with the agents that cause plant disease. 2) Understand the relationships of hosts, pathogens, and environment that determine the occurrence and severity of plant diseases. 3) Learn how plant diseases are managed or controlled. 4) Learn how plant diseases have affected humans both historically and in modern times. 5) Learn to identify a selection of plant diseases that occur commonly in Minnesota. 6) Learn basic laboratory techniques used to detect, identify and manipulate plant pathogens.

PlPa 3090 Research in Plant Pathology
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Assignment of a special problem to undergraduates desiring an opportunity for independent research in plant pathology. The student determines the problem.
Style: 100% Laboratory.
Grading: 100% laboratory evaluation.

PlPa 4096 Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Supervised practicum professional experience in plant pathology. Practicum may be completed in government, higher education or private industry setting. Directed toward senior undergraduates.
Grading: 100% other evaluation. Job performance, self-evaluation

PlPa 5090 Issues in Plant Pathology
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Current topics and research in plant pathology. Directed at undergraduates (junior and senior) as well as graduate students. Consult Class Schedule or department for current offering.
Style: 50% Lecture, 50% Discussion.
Grading: 100% special projects. depends on topic and instructor

PlPa 5301 Plant Genomics
3 credit(s);Intro course in genetics or instr consent Credit will not be granted if credit has been received for: PBIO 5301;
Instructor: Young,Nevin Dale
Description: Plant genomics is a class intended for graduate and advanced undergraduate students who are interested in recent discoveries in genomics and bioinformatics applied to the study of plants. Students learn strategies for structural and functional genomics by exploring the genomes of model plant systems, comparative genomics, evolution of gene families, genome expression and genome restructuring. Students develop basic understanding about the fundamentals of sequence analysis, database searching and data-mining through computer labs and independent projects. Most class sessions consist of lectures, discussions, and small group activities. Prerequisites are an introductory course in genetics and either cell biology or biochemistry -- or -- consent of instructor.
Style: 60% Lecture, 20% Discussion, 20% Laboratory. Frequent small group activities and computer labs
Grading: 30% mid exam, 30% final exam, 15% special projects, 15% written homework, 10% class participation.
Exam Format: Approximately 10 short answer question plus one or two longer essay-type questions.

PlPa 5480 Principles of Plant Pathology
3 credit(s);
Instructor: Arenz,Brett Evan
Description: This course is intended for graduate students and undergraduate students in their third or fourth year that are interested in learning about principles of plant pathology, diseases that affect plants, microbiology and microbial and plant interactions. In this course students will learn principles of plant pathology through lectures and demonstrations and exercises in laboratory. Students will gain knowledge of mycology and select diseases caused by fungi within Ascomycota, Basidiomycota and the fungal-like Oomycota.
Diseases caused by bacteria, nematodes, viruses, parasitic plants and abiotic damage are also examined. Lectures will include information concerning the history and importance of plant pathology, mycology, bacteriology, nematology, virology, infection process, genetics of host and microorganism interactions, epidemiology of diseases and disease control strategies. In the hands-on laboratory period the student will learn laboratory skills, gain experience using the microscope, work with microorganisms, learn diagnostic skills, and be able to recognize 30 plant diseases.

PIPa 5999 Special Workshop in Plant Pathology
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Special workshops involving current issues and/or techniques (experimental and laboratory) in plant pathology. Directed towards senior undergraduates and graduate students.
Style: Depends on the nature of the workshop experience.
Grading: 100% special projects. Depends on the nature of the workshop experience.

PIPa 8090 Advanced Procedures and Research in Plant Pathology
1-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Kurle PhD, James E.
Description: Student may contact the instructor or department for information.

PlPa 8200 Seminar
A-F only, 1 credit(s);
Instructor: Bradeen, James M
Description: Student may contact the instructor or department for information.

Polish 320 Folwell Hall

Plsh 1101 Beginning Polish
5 credit(s); Credit will not be granted if credit has been received for: PLSH 4101;
Instructor: Polakiewicz, Leonard Anthony
Description: This course is first in a sequence of courses (Plsh 1101 and 1102) designed to develop basic proficiency in Polish in listening, speaking, reading, and writing, and to acquaint students with Polish culture. Students do regularly assigned grammar exercises, listen to tapes, and are required to participate in each class session through individual recitation, and whole-group and small-group interactive communicative activities. Two textbooks are used: Oscar Swan's "First Year Polish", and Leonard Polakiewicz’s "Supplemental Materials for First Year Polish". Both textbooks are accompanied by audio tapes. As part of the four semester Polish language sequence, this course is designed to satisfy CLA language proficiency requirements. Target audience includes: undergraduate and graduate students, particularly those interested in East-Central European Area Studies, students who intend to engage in business in Poland and East-Central Europe, and those pursuing Slavic Studies.
Style: 30% Lecture, 10% Laboratory, 20% Small Group Activities, 40% Student Presentation. recitation and interactive activities
Grading: 25% final exam, 35% quizzes, 10% written homework, 20% class participation, 10% other evaluation. oral exam
Exam Format: fill in blanks, answer questions, translation

Plsh 4101 Beginning Polish
3 credit(s); Fourth sem course in another language or grad student Credit will not be granted if credit has been received for: PLSH 1101;
Instructor: Polakiewicz, Leonard Anthony
Description: Student may contact the instructor or department for information.

Political Science 1414 Social Sciences Tower

Pol 1001 American Democracy in a Changing World
4 credit(s); Meets CLE req of Social Sciences
Instructor: Abernathy, Scott F
Description: This course is intended to introduce students to the expressed hopes of the American people for their government and to the institutions and processes that have been created and recreated to achieve these hopes. What do we mean by good government? Have we achieved it? How do we build it? Through an examination of the roles of American political institutions and the behavior of American citizens, we will be able to critically reflect on issues such as political and economic inequality in the U.S., the role of American political and economic power in the world, and the possibility for an American public policy that lives up to the ideals of the founders. By the end of the semester students should have a basic understanding of the structure and function of American
government as well as an increased ability to critically reflect on the degree to which our institutions, processes, and citizens live up to the expectations placed on them.

**Grading:** 60% Lecture, 20% Discussion, 20% Small Group Activities.

**Style:** 60% Lecture, 20% Discussion, 20% Small Group Activities.

**Grading:** 50% mid exam, 25% final exam, 25% reports/papers.

**Pol 1001 American Democracy in a Changing World**

**4 credit(s); Meets CLE req of Social Sciences**

**Instructor:** Karch, Andrew Jonathan

**Description:** Frequent elections have long been a part of the American political landscape, and over time American politics has evolved in the direction of greater potential for popular participation. More people have gained the full rights of citizenship, the connection between representatives and the public has become increasingly direct, and the number and frequency of elections have increased. These trends have resulted in what some observers call the "permanent campaign." This course introduces students to the institutions and processes of American government, concluding with a wide-ranging discussion of recent issues in American public policy. In doing so, it examines the main elements of the permanent campaign, the factors that contributed to its emergence, its impact on political institutions and the policymaking process, and its normative implications.

**Style:** 90% Lecture, 10% Discussion.

**Pol 1001 American Democracy in a Changing World**

**4 credit(s); Meets CLE req of Social Sciences**

**Instructor:** Nakayama, Bryan

**Description:** This course is intended to introduce students to the expressed hopes of the American people for their government and to the institutions and processes that have been created and recreated to achieve these hopes. What do we mean by good government? Have we achieved it? How do we build it? Through an examination of the roles of American political institutions and the behavior of American citizens, we will be able to critically reflect on issues such as political and economic inequality in the U.S., the role of American political and economic power in the world, and the possibility for an American public policy that lives up to the ideals of the founders. By the end of the semester students should have a basic understanding of the structure and function of American government as well as an increased ability to critically reflect on the degree to which our institutions, processes, and citizens live up to the expectations placed on them.

**Style:** 60% Lecture, 20% Discussion, 20% Small Group Activities.

**Grading:** 50% mid exam, 25% final exam, 25% reports/papers.

**Pol 1025 Global Politics**

**4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences**

**Instructor:** Freeman, John Roy

**Description:** Global politics introduces students to the study of the world's political systems and to the debates over certain global issues. Various theoretical frameworks are examined throughout the semester, but the emphasis is on the so-called liberal perspective. Related middle range accounts of war and of international political economy also are studied. While many global political issues will be mentioned, the focus will be on the legacies of the East-West conflict, particularly nuclear proliferation, and on the North-South conflict, especially Southern demands for distributional justice. At the end of the semester, students will be able to describe and predict the evolution of a global political system. In addition, they will be able to carve out and defend a stand on one of the global issues mentioned above.

**Style:** Some digitized video materials are used.

**Grading:** 30% mid exam, 40% final exam. Weightings are approximate

**Exam Format:** A mix of short answers/essays and long essays

**Pol 1025 Global Politics**

**4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences**

**Instructor:** Gagnon, Jennifer Marie

**Description:** How do we begin to think about, question, and change the global world in which we live? Is studying global politics about seeing the possibility of peace or the inevitability of war? Is globalization a force of increasing equality or inequality? What is power? Can humanitarian action prevent or ameliorate conflict? Can global actors cooperate to resolve problems such as inequality, poverty, violence, and violations of human rights? This course will introduce students to the central problems of global politics and aims to equip students with the analytical and critical skills needed to assess and interpret contemporary events in global politics.

**Pol 1054 Politics of Countries Around the World**

**4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences**

**Instructor:** Shively, W Phillips

**Description:** This course introduces political science through the comparative study of politics in various countries. There is a considerable emphasis on democracy and how it works -- including comparison and contrast with how politics works in nondemocratic
regimes. We will look at all aspects of politics -- the nature of political power, how politics islodged in the state, various ways to organize at the mass level and to govern, the nature of justice, etc. The class will consist of three lecture sessions a week. The course is appropriate for both majors and non-majors.

Pol 1054H Honors: Politics of Countries Around the World

A-F only, 4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Samuels, David Julian
Description: This course is an introduction to comparative politics, which is the study of politics within countries around the world. The topics we explore include the establishment of political order in the states that govern the world, the distinction between democratic and non-democratic states, the emergence and sometimes collapse of democracy, the sources of violent civil conflict, and the political factors that lead to economic growth or stagnation.
Style: 50% Lecture, 30% Discussion, 20% Small Group Activities.
Grading: 20% mid exam, 30% final exam, 50% reports/papers. 1 5-page paper, several 1-2 page papers/in-class writing

Pol 1201 Political Ideas and Ideologies

4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Valverde, Sergio
Description: This semester, we will study what democracy is and how, and to reflect on how the relation between democracy and power stands today. We will study first, through a series of weekly modules, key political concepts such as power, authority, freedom, violence, rights, and ideology. In the second part of the course, we will study how these general concepts are crystallized in the current context of liberal democracy and democratization. This course is designed as an introduction to undergraduate students from across disciplines to the subfield of political theory/philosophy within political science. The instructor, the teaching assistant(s), and course participants will use active learning strategies (cooperative learning, interactive lecturing, discussion, critical thinking) and will facilitate discussion addressing key text in political theory. Course participants will develop oral, reading, and writing skills that promote critical understanding, interpretation, and engagement with the political issues of our time. Political theory represents a way of thinking and a practice of discovering and questioning the meaning and exercise of politics, power, and authority. With this in mind, POL1201 is designed and conducted with the intent of creating a political learning environment. Expect to be challenged both by your political views, to explore assumptions about your ways of thinking politics. Expect to gain a renewed understanding of the importance of politics in your life. Expect to develop an appreciation for political education in which being an individual and being a citizen are interdependent activities shaped by all of us. The required texts for the course will be provided in PDF format and they include texts and excerpts from Plato, Aristotle, Thomas Hobbes, John Locke, Jean-Jacques Rousseau, Immanuel Kant, Karl Marx and Frederick Engels, Lenin, Max Weber, Carl Schmitt, Walter Benjamin, Hannah Arendt, Antonio Gramsci, Max Weber, Aime Cesaire, Frantz Fanon, Enrique Dussel, Sheldon Wolin, and Jacques Ranciere.
Style: 30% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 30% Student Presentation. Attendance is not graded. Yet, due to the participatory nature of this course, attendance at each class session is required.
Grading: 25% final exam, 50% reports/papers, 25% in-class presentation.
Exam Format: The final exam will assess your understanding of political concepts and ideologies through concept identification (ID). Also there will be an essay question chosen from a list of possible topics. Final exam prompts will be distributed in advance.

Pol 1201 Political Ideas and Ideologies

4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Tronto, Joan C
Description: Here are the questions we will attempt in this course to answer through intensive reading and writing: What is the purpose of politics? What is the meaning of freedom? Of justice? How can I make sense of my political views? What are the limits of my political views? What is political theory and why should I try to approach political ideas theoretically? This semester this course will focus especially on the question of democracy. Is democracy the best form for organizing political life? What are its strengths? What are its weaknesses? How might we improve contemporary democratic life? Students will read and write great deal over the course of the semester. We will work, as a class and with TAs and the instructor, on the processes of reading and writing about these difficult texts and subjects. Here are the five books ordered for the course through the bookstore; they are listed in the order that we will read them. The Republican Plato, tr Grube (Hackett) On Liberty and Other Essays John Stuart Mill, ed. J. Gray (Oxford University Press) Later Political Writings Marx, ed. T. Carvell (Cambridge University Press) The Wretched of the Earth Fanon (Grove. 2004 ed) Selected Political Writings Gandhi (Hackett)
Style: 70% Lecture, 30% Discussion.
Grading: Students may receive a better grade if their work improves over the course of the semester
Exam Format: Final exam questions will be distributed in advance.

Pol 1234 Citizen U: Building Tomorrow's Citizens Today

A-F only, 3 credit(s);
Instructor: Soper, Paul W
Description: Are you interested in pursuing a career in public service? Do you plan to run for office in the future, or work in a government agency such as the State Department or the FBI or the MN DNR), or become a professional campaign manager or lobbyist, or work as an issue activist on a cause important to you? Would you like to learn more about the variety of public service careers open to a college graduate? Do you wonder what motivates people to pursue careers in politics, public administration, and community service, and how these motivations vary across career fields? Would you like to explore some options for future internship or service learning while at the University? Then this course is for you! This course is the Political Science Department's introduction to political and civic engagement. Through a moderate amount of reading, numerous guest speakers, and a discussion-oriented class format, we will explore the meaning of public service and the main types of public service careers that you could pursue. We will think about the virtues and challenges associated with doing public service work, and how these differ across different types of jobs and venues for serving the public. Finally, in addition to gaining a better understanding of the concept and varieties of public service work, you will acquire practical knowledge and skills related to the search for public service work opportunities. Intended for first- and second-year undergraduates.

Style: 10% Lecture, 50% Discussion, 10% Small Group Activities, 20% Guest Speakers.

Grading: 60% reports/papers, 40% class participation.

Pol 1905 Freshman Seminar: Candidates, Voters, Campaigns 2012 Election Cycle
3 credit(s);
Instructor: Rahn, Wendy Marie
Description: Student may contact the instructor or department for information.

Pol 1905 Freshman Seminar: As War Changes, So Does Political Authority
3 credit(s);
Instructor: Duvall, Raymond D
Description: Student may contact the instructor or department for information.

Pol 1905 Freshman Seminar: Islam & Democracy
3 credit(s);
Instructor: Collins, Kathleen A
Description: The course will explore the contested relationship between Islam and democracy. We will study the intense global debates about whether Islam is compatible with democracy, and if so, then how it is or could be compatible. These debates involve issues of Muslim religiosity and secularism, Muslim popular opinion, recognition of secular authority, ideas of legitimate government, shari'a law, women's rights, minority religious rights, and jihad. We will examine these issues from a historical, cultural, and political perspective. We will read various perspectives on each issue of debate, and study the arguments in light of empirical examples from various Muslim countries, such as Turkey, Iran, Saudi Arabia, Uzbekistan, and Azerbaijan. There will be four analytical papers for the course (5 pages each), and no exam.

Pol 3080 Faculty-Supervised Individual Internships
A-F only, 3-13 credit(s), max credits 15, 3 completions allowed;
Instructor: Soper, Paul W
Description: Students working in political or governmental internships may receive credit for academic work completed in association with their internship work. Students may receive 1 credit for every 3 hours (per week) of internship work. Academic work increases with increased hours worked. Assignments will include: weekly journal, 5-7 page essay, 10 page research paper. Acceptable internships include: US Congress, MN state legislature, federal, state, and local Gov't agencies, as well as political parties, campaign organizations, and non-governmental advocacy groups. To enroll in this course, students must first arrange their internship, and then contact the instructor before the semester begins. Students who do not contact the instructor before the end of the first week of the semester will NOT be enrolled in this course. NOTE: Students doing internships outside the US must contact me at least 2 months before the beginning of the semester.
Style: Fieldwork/Participant-observation

Pol 3085 Quantitative Analysis in Political Science
A-F only, 4 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Miller, Joanne Marie
Description: Pol 3085 Quantitative Analysis in Political Science Class Schedule for POL3085 | Bookstore for POL3085 | Section Status for POL3085 | Course Catalog Grading basis/credits: A-F only, 4 credit(s) Description: Political science 3085 is an upper-level undergraduate course designed to introduce you to the techniques political scientists use to answer research questions with quantitative data. Political scientists increasingly utilize quantitative data to shed light on a variety of diverse topics, such as the relationship between democracy and economic growth, election outcomes in Brazil, and voter turnout in the United States. This course will focus on issues of research design, hypothesis formation, causation, basic statistical techniques, and how to implement these techniques and manage data using computer software. Not only will you learn how to analyze quantitative data, but this course will
also enable you to be a more informed consumer of political science research. By the end of the semester, you should be able to:
develop testable research questions and hypotheses; understand how to set up an appropriate research design to test your hypotheses; apply the appropriate statistical techniques when using quantitative data to test your hypotheses; and more effectively consume and evaluate political science research and political news that uses quantitative data.

**Pol 3235W Democracy and Citizenship**

**3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive**

**Instructor:** Beaumont, Elizabeth  
**Description:** This course explores the meanings of democracy and citizenship from historical and contemporary perspectives. Democracy is almost universally championed in contemporary politics. But what does democracy mean, what does it require of us, and why should we value it? Who is included in the concept of "we the people," demos and who gets to decide? How should democracies deal with differences and conflicts? What are the rights and responsibilities of the citizens of a democratic community? Why is there on-going fear that democracies devolve into tyranny? How have understandings of democracy and citizenship evolved over time? What kinds of practical mechanisms and processes should be used to institutionalize democracy? We will explore these questions from historical perspectives and in relation to current political events and challenges. You should emerge from this course not only with a deepened understanding of the historical and intellectual tradition of democratic theory, but also with the ability to articulate your own democratic ideals, your understanding of democratic citizenship, and how you conceive of your relationship to these ideals.

**Style:** 50% Lecture, 35% Discussion, 10% Small Group Activities, 5% Student Presentation.

**Pol 3306 Presidential Leadership and American Democracy**

**3 credit(s); Credit will not be granted if credit has been received for: POL 5306;**

**Instructor:** Jacobs, Larry  
**Description:** Presidents have been at the center of America’s titanic struggles? from battles over slavery and civil rights, Social Security and Medicare to national security and war making. Presidential heroism has been matched, however, by defeats and setbacks? from the resignation of Richard Nixon and impeachments of Andrew Johnson and Bill Clinton to the failures of Lyndon Johnson’s war in Vietnam, Ronald Reagan’s drive to permanently reduce the size of government, and George W. Bush’s crusade to partially privatize Social Security and to bring a stable democracy to Iraq. The U.S. presidency is tangled in enduring paradoxes that endemically place the chief executive in a ?no win? situation. Journalists and many Americans expect presidents to be both independent leaders that serve the ?national interest? and a democratic force that represents ?the people? against special interests. Presidential efforts to fulfill these multiple and competing expectations and those of their intense supporters not infrequently thrust them into the role of disruptive force? one that challenges the country’s social, economic, and political systems. Why do presidents persistently slip into these no-win situations? What are the president’s powers and what constraints do they face? Why has Barack Obama failed to revive the economy and tackle foreign policy? What are the prospects for the next president? This course will trace the political development of the presidency as well as explore its contemporary role in domestic and foreign policy. The course will consider these enduring themes in terms of the presidency’s place in the American constitutional order and its relationship with the mass public, the federal bureaucracy, and Congress.

**Style:** 40% Lecture, 5% Film/Video, 30% Discussion, 15% Laboratory, 10% Student Presentation. In addition to dynamic, participatory lectures, the course relies on small group tutorials where students work together to critically analyze key puzzles in the presidency.

**Grading:** 30% mid exam, 40% final exam, 30% reports/papers. Class participation is taken into account where there is discretion.

**Exam Format:** Short answer and essay.

**Pol 3321 Issues in American Public Policy**

**3 credit(s);**

**Instructor:** Phinney, Robin Linden  
**Description:** The United States faces many problems: a $14 trillion dollar national debt; rising health care costs; a poverty rate of nearly 15 percent; and a Washington pressure system skewed in favor of big-moneyed special interest groups. Most Americans believe that the government ought to do something to solve such problems. Yet debates over the nature and extent of the government’s involvement abound. This course will analyze the politics of policymaking on these and other issues in the United States. Over the semester, we will consider how and why political actors decide to address some problems but not others, how policies are created and implemented, and how politicians and scholars evaluate their effectiveness. The course will be organized thematically. We will begin by exploring theories of the policy process, specifying the role of political institutions and political actors in this process. Next, we will explore how issues emerge on the political agenda, and how policies are made in legislative and non-legislative settings. We will examine how policies, once enacted, are implemented by the bureaucracy, and how scholars analyze the success or failure of those policies. We will integrate theories about politics and policymaking with a focused look at four domestic policy issues. For each issue, we will ask two sets of questions. The first set of questions will involve the politics of policymaking on the issue. How and when has the issue arisen on the agenda? How have political institutions and policy actors enabled or constrained policymaking on this issue? The second set of questions will consider a recent attempt by the government to regulate or resolve the issue through policy. What does the policy do? What are the specific problems that it addresses? What are its goals? Was the policy successful?
Pol 3325 U.S. Campaigns and Elections
A-F only, 3 credit(s);
Instructor: Pearson,Kathryn Lynn
Description: This course examines presidential and congressional campaigns and elections in the United States. We will explore how political scientists study and understand electoral politics. What theoretical generalizations can we make about candidates, voters, parties, and the media? In what ways do the electoral context and the "rules of the game" matter? The 2012 elections promise to be exciting for many reasons. Students will monitor the presidential campaigns and some congressional campaigns to assess how theory and practice converge in 2012. Students will write a series of short papers analyzing specific elements of major campaigns and a research paper of around ten pages that addresses one of the themes of the course.

Pol 3451W Politics and Society in the New Europe
3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Gingrich,Jane Rebecca
Description: This course focuses on the politics of the European Union. In 1958, six European Countries joined together to form a common market. Fifty years later, the European Union now includes twenty seven European countries, and governs issues as diverse as trade, environmental, and immigration policy. Indeed, the EU has developed into one of the most important and interesting systems of contemporary governance. However, in recent years, the failure of the EU constitution, discontent among new and old member states, and an uncoordinated response to the world financial crisis, have raised questions about the future of the EU. This course introduces students to the European Union in three steps, looking at how its internal structure works, what areas it governs (and does not govern), and the challenges it faces the. The course combines careful analysis of the working of the European Union with weekly discussions of current events and key cases. In so doing, students will both learn about this crucial institution, and grapple with questions such as the nature of sovereignty, identity, democracy, and security in contemporary Europe.
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 30% final exam, 40% reports/papers, 10% class participation.

Pol 3465 Theories of Political Economy
A-F only, 3 credit(s);
Instructor: Ansell,Benjamin William
Description: This class will introduce you to the theories of economics and politics that underlie debates between politicians and commentators in modern life. You will learn about the classic debates among economists and political scientists about the role of government in the market and apply these theories to an important contemporary debate: the causes of, and response to, the current financial crisis. The course splits into four sections, with the first three examining the historical development of political economy from before Adam Smith through to debates of the last few years. Section A begins by examining the history of political economy? as it first developed, moving through the classic authors of the 'classical' school: Adam Smith, Thomas Malthus, David Ricardo, John Stuart Mill, and Karl Marx. Though these theories may seem arcane to you, they provide the basic building blocks of the current debate about the appropriate role of government. We then turn in Section B to the development of modern economics and political science, after the disciplines broke apart. Here we will discuss the theories of Alfred Marshall, John Maynard Keynes, Friedrich Hayek, Milton Friedman, and current economists like Paul Krugman and John Cochrane. We also examine so-called 'public choice' and 'rational choice' theories of politics which developed in political science as an application of the tools of economics. The dominance of economic arguments assumes humans are fully rational and that concepts like power, culture, and religion have no important role, produced a backlash, which we will discuss in Section C. Here we examine how sociologists and anthropologists introduced cultural accounts of the market, how historians and political scientists explored the role of power and national differences, and finally how psychologists have undermined the very theory of rational economic actors. As we shall see, many economists have come round to this way of thinking, particularly in light of the financial manias of the past decade and the apparent non-functioning of the market economy. Thus, we conclude in Section D by applying our theories of economics and politics to a key contemporary debate: the financial crisis of 2008-2009 and the government response (and the response to that!). The evaluation for the course is as follows. First, there will be a midterm, worth 35% of the course grade. The midterm will be a mix of IDs, short answers, and a medium length essay. Second, there will be a final exam, worth 65% of the course grade, held during finals. This will be made up of two long essays, one theoretical and one applying theories to current events.
Style: 80% Lecture, 20% Discussion.
Grading: 35% mid exam, 65% final exam.

Pol 3475 Islamist Politics
A-F only, 3 credit(s);
Instructor: Collins,Kathleen A
Description: Student may contact the instructor or department for information.

Pol 3477 Political Development
3-4 credit(s), max credits 4, 1 completion allowed;Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Caraway, Teri L.
Description: How can the vast disparities of wealth between countries be explained? Why have some countries in the post-colonial world, in particular those of East Asia, experienced stunning economic growth, while those in others parts of the world been stuck in a development rut? This course will explore contending answers to these difficult but important questions. We will do so through discussions of different explanations of development and underdevelopment, examining these issues concretely in several countries, and discussing contemporary "hot topics" such as micro-credit, AIDS, and the resource curse.
Style: 45% Lecture, 15% Film/Video, 20% Discussion, 20% Small Group Activities.
Grading: 20% mid exam, 20% final exam, 40% reports/papers, 20% class participation. For students taking 4 credits, the research paper=25%, participation 15%, midterm exam=15%, final exam=15%, and each essay 15%.
Exam Format: The exams will be multiple choice and short answer questions. The exams will focus on topics not covered in the short papers, so collectively the exams and the essays function as four midterms. The final exam is not cumulative.

Pol 3479 Latin American Politics
3 credit(s); Credit will not be granted if credit has been received for: POL 5479; Meets CLE req of Global Perspectives
Instructor: Hilbink, Lisa
Description: This course examines historical and contemporary patterns of political and economic stasis and change in Latin America. It aims not only to help students understand the similarities and differences in outcomes in the region over time, but also to reflect on what Latin America's experiences can teach us about the requirements of and barriers to meaningful democracy and sustainable and equitable development around the world. The course presents competing theoretical approaches and discusses them in the context of the political trajectories of four major Latin American cases: Argentina, Chile, Mexico, and Venezuela. Readings on other countries are occasionally assigned and students have opportunities to draw on other cases for writing assignments.
Style: 70% Lecture, 30% Discussion.
Grading: 20% mid exam, 25% final exam, 35% reports/papers, 20% class participation.
Exam Format: Combo of short answer, IDs, and essay

Pol 3739 Politics of Race, Class, and Ethnicity
3 credit(s);
Instructor: Nimtz Jr, August H
Description: What similarities are there, if any, between the conflicts in the former Yugoslavia, South Africa, Northern Ireland, Rwanda, and Palestine/Israel? Why does racial and ethnic conflict persist in so many regions of the world? To what extent does racial conflict in th U.S. reflect the increasing disparities in wealth? How is racial/ethnic oppression similar and different from sexual oppression? These are some of the questions that this course will address and attempt to answer. This will be done primarily through a comparative analysis of racial/ethnic/class conflict in the U.S., South Africa, and Cuba with particular attention on the experiences of Blacks in the three countries.
Style: 75% Lecture, 25% Discussion.
Grading: 25% mid exam, 50% final exam, 25% reports/papers.
Exam Format: Essay.

Pol 3766 Political Psychology of Mass Behavior
3 credit(s); Meets CLE req of Social Sciences
Instructor: Lavine, Howard G
Description: Student may contact the instructor or department for information.

Pol 3767 Political Psychology of Elite Behavior
3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Sullivan, John L
Description: In this course, we will examine the intersections of elite political decision-making, personality and social psychology. We will explore the usefulness of psychological theories for investigating the role of the individual, of group processes, and of the political context in decision-making by political leaders, particularly U.S. Presidents. We will examine how the personalities of political leaders affect the type and quality of their decision-making, how group processes can degrade or enhance good decision-making, how decision-makers employ historical analogies and broader metaphors when they decide the fate of nations. We will examine these general forces by conducting case studies of Presidential decision making, including the Bay of Pigs, Cuban Missile Crisis, Watergate, the Iranian Hostage Crisis, the Iran-Contra affair, the Gulf War, etc.
Style: 65% Lecture, 15% Film/Video, 20% Discussion.
Grading: 30% mid exam, 30% final exam, 30% reports/papers, 10% class participation.
Exam Format: Short answer and medium length essay

Pol 3785 Persuasion and Political Propaganda
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: POL 3785H;
Instructor: Miller, Joanne Marie  
Description: This course will provide an introduction to persuasion and political propaganda. We will first define propaganda and discuss the primary theories in persuasion and propaganda that could be applied to designing and analyzing propaganda campaigns. We will then apply these theories to analyze WWI and WWII propaganda posters, propaganda films, and political campaign commercials. This course is intended to be 1/3 or less lecture and 2/3 or more discussion. I intentionally limited the number of students in this class to facilitate class discussion and group exercises.  
Style: 30% Lecture, 30% Discussion. movies  
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 20% special projects, 20% class participation.  
Exam Format: short answer/essay

Pol 3833 The United States and the Global Economy  
3 credit(s);  
Instructor: Ansell, Benjamin William  
Description: This course provides a detailed overview of the impact of the global economy on domestic politics. Much of the newspaper is devoted to foreign affairs from terrorism to trade treaties. However, global forces impact all forms of politics, not just those we traditionally think of as “foreign policy.” For example, US labor markets are highly dependent on cheap immigrant labor, the housing market is (or was?) financed by cheap foreign capital, and Walmart is dependent on cheap foreign resources to keep prices everyday low. Both the 2008 primaries and general election were dominated by discussion of trade policy (Obama and Clinton on NAFTA) and financial policy (Obama and McCain on the bailout) as were the 2010 midterms (deficits and the bailout)? thus complicated economic issues had major electoral consequences. This course will help you understand how the ever more complex global market impacts politics from the international to the local level. You will, I hope, become educated consumers of economic news, and be able to link it clearly to your own political preferences and those of other citizens in the US and abroad. The course splits into two sections. We begin the first section by considering the global market from a historical perspective from its modern genesis in the late nineteenth century through to the current economic crisis sweeping across the globe. The second section examines how scholars have attempted to explain these historical patterns. We do this by breaking down globalization into trade, finance, development, and migration looking at both explanations that focus on interactions among states as well as those that examine the behavior of politicians, businesses and citizens.  
Style: 80% Lecture, 20% Discussion.  
Grading: 33% mid exam, 67% final exam.

Pol 3835 International Relations  
3 credit(s); meets CLE req of Global Perspectives; meets CLE req of Social Sciences  
Instructor: Donkova, Ralitsa Hristova  
Description: This course introduces students to the major theoretical approaches in International Relations (Liberalism, Realism and Critical Theory) used to analyze issues and problems in global politics. Students will gain an understanding of these theoretical frameworks and apply them to current problems in global politics. Specific topics covered in the course include: the role of international organizations, NGOs and corporations; international law; international cooperation; state pursuit of power and security; and contemporary issues such as humanitarian intervention, climate change, globalization, economic crisis and poverty. The key objective of the course is for students to develop an understanding of how the various theoretical approaches lead us to different ways of thinking about and solving problems in global politics. It is recommended that this course be taken prior to coursework at the 4xxx- or 5xxx-level in the field of international relations. Students should have basic familiarity with the subject matter of international politics, such as is provided in POL 1025 Introduction to Global Politics. POL 1025 is not a prerequisite for this course, but is strongly recommended.  
Style: 70% Lecture, 30% Discussion.

Pol 4210 Topics in Political Theory: Catastrophes, Crises, and Political Life  
A-F only, 3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Vazquez-Arroyo, Antonio Y  
Description: This course will explore the political dimensions of catastrophe, from ethnic cleansing to "natural" disasters, in recent history. Some of the questions that we will address are the extent to which catastrophes are social and political events; what is "natural" and what is "social" about "natural disasters;" the intersection between nature and history in interpreting catastrophic events; and the role of images of catastrophe in the constitution of political life. By looking closely at how the ethical and political import of catastrophe has been construed, we will also address questions of history, memory, and representation. In lieu of these questions and concerns, we will ask how narratives of catastrophe are produced and reproduced, who does the producing, to what extent, and to what political effect. This course combines the study of theoretical texts with historical examples such as genocides, famines, and global warming in order to ponder the aforementioned questions.  
Style: 70% Lecture, 30% Discussion.

Pol 4253 Modernity and Its Discontents: Late Modern Political Thought  
3-4 credit(s), max credits 4, 1 completion allowed; credit will not be granted if credit received for: 3253 Credit will not be
Pol 4403W Comparative Constitutionalism

3 credit(s);
Instructor: Luxon, Nancy
Description: Modernity and its Discontents surveys European political theory of the 19th century, and concentrates on the emergence of capitalism and the liberal state as well as the challenges, alienation and discontent that develop alongside each. With these two historical developments in mind, this course will trace three themes. Central to capitalism and the liberal state both, is the ideal of individuality. To develop our analysis of individuality as an ideal, we will ask, what are the characteristics that define (or ought to define) individuals? What are the terms on which individuals develop themselves and in pursuit of which political, economic, or ethical goals? Second, we will analyze theories of emancipation and freedom. Even as the 19th century witnesses an extension of voting rights to increasing numbers of people, and even as political liberties appear more democratically accessible, thinkers struggle to define the scope and nature of these liberties. What kinds of political institutions and recognition best permit individuals to express themselves as citizens? and what are the psychological, economic, or political obstacles that might impede this expression? Third, political expression implies knowledge: an ability to analyze one's context and to determine what is to be done. Alongside the thinkers of the period, we will consider the kind of information about the world that is necessary in order to act in ? and perhaps transform ? one's immediate context and longed-for future. Readings for the course include Hegel, Marx, Tocqueville, Mill, Nietzsche, Freud, and Weber.
Style: 70% Lecture, 30% Discussion.
Grading: 60% reports/papers, 25% reflection paper, 15% class participation.

Pol 4275 Contemporary Political Thought

3 credit(s);
Instructor: Luxon, Nancy
Description: Violence, Sex, Money, and Race: Political theory from the early 20th century onwards faces challenges in framing the conflicts and contestations that define contemporary politics. Drawing on the theoretical frameworks offered by Judith Shklar, Isaiah Berlin, Michel Foucault, Jurgen Habermas, and Charles Taylor, this course will explore contemporary problems of political violence, sex, money, and race. The first weeks of the course will explore three models for politics: the politics of liberties (that defines politics as protection from government intrusion), the politics of discipline (that defines politics as relations of power and asymmetry), and the politics of recognition (that defines politics as a site of dignity and respect). Readings and class discussion will then consider how these theories differently help us to understand: the political violence of torture; gender, sexuality, and domestic violence; crime, punishment, and modern prisons; and finally, race relations in America. Class discussions will move consistently between political theories and current political events. Further readings will include works by Hannah Arendt, WEB Du Bois, Judith Butler, Antonio Negri and others.
Style: 60% Lecture, 40% Discussion.
Grading: 55% reports/papers, 35% reflection paper, 10% class participation.

Pol 4310 Topics in American Politics: Law, Sovereignty,& Treaty Rights

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Wilkins, David E
Description: Student may contact the instructor or department for information.

Pol 4315W State Governments: Laboratories of Democracy

4 credit(s);1001 or equiv, non-pol sci grad major or instr consent Credit will not be granted if credit has been received for: POL 5315;Meets CLE req of Writing Intensive
Instructor: Karch, Andrew Jonathan
Description: This course examines the recent revitalization of political institutions in the American states and the implications of this resurgence for the making of public policy. State governments regulate and tax a wide range of business activities and perform a host of vital services. Even though state governments affect our lives every day, however, they are rarely at the forefront of the minds of the American public. The goals of this course are to introduce you to these important arenas of government and to examine the Minnesota political system in a comparative perspective.
Grading: First midterm (30%) Second midterm (30%) Final exam (40%)

Pol 4403W Comparative Constitutionalism

3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Champe, John Charles
Description: How and why do constitutions matter in different polities, and/or how can they be made to matter? What purposes, general or specific, do we want constitutions to serve? And under what conditions are those goals likely to be achieved? Is constitutionalism supportive of or at odds with the construction and maintenance of a meaningful democracy? What kinds of rights, if any, should be included in a constitution? Is an empowered judiciary necessary to constitutionalism? If not, why not? If so, how should that judiciary be configured institutionally so as to be both legitimate and effective? This course seeks to answer these and other questions through an examination of the theory and practice of constitutionalism in different countries. We begin with a conceptual and normative inquiry into the relationship between constitutionalism, the rule of law, and democracy, and then turn to an analysis of the
origins and role of constitutions, and the relevance of courts with constitutional review powers, in four cases: the U.S., Germany, Canada, and South Africa. The course takes as its particular focus the issue of equality—political, social, and economic—and aims to help the student determine if, how, and why constitutions and courts have advanced or impeded equality in these four polities. The course is writing intensive and offers senior paper credit for Poli Sci majors (though the course is open to non-majors). Crafting a written, evidence-based argument that speaks to broader debates about the origins, nature and/or implications of political decisions and outcomes is central to Political Science. To hone this skill, all students enrolled in this course pursue independent research in order to produce a final paper at least 15 pages in length. Research and writing tutorials are integrated into the first ten weeks of the course, as are set deadlines for submission of paper topics, bibliographies, thesis statements and outlines, and a complete rough draft. **Style:** 65% Lecture, 25% Discussion, 10% Small Group Activities. **Grading:** 40% mid exam, 50% reports/papers, 10% class participation. **Exam Format:** IDs and essays

**Pol 4403W Comparative Constitutionalism**  
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive  
**Instructor:** Hilbink,Lisa  
**Description:** How and why do constitutions matter in different polities, and/or how can they be made to matter? What purposes, general or specific, do we want constitutions to serve? And under what conditions are those goals likely to be achieved? Is constitutionalism supportive of or at odds with the construction and maintenance of a meaningful democracy? What kinds of rights, if any, should be included in a constitution? Is an empowered judiciary necessary to constitutionalism? If not, why not? If so, how should that judiciary be configured institutionally so as to be both legitimate and effective? This course seeks to answer these and other questions through an examination of the theory and practice of constitutionalism in different countries. We begin with a conceptual and normative inquiry into the relationship between constitutionalism, the rule of law, and democracy, and then turn to an analysis of the origins and role of constitutions, and the relevance of courts with constitutional review powers, in four cases: the U.S., Germany, Canada, and South Africa. The course takes as its particular focus the issue of equality—political, social, and economic—and aims to help the student determine if, how, and why constitutions and courts have advanced or impeded equality in these four polities. The course is writing intensive and offers senior paper credit for Poli Sci majors (though the course is open to non-majors). Crafting a written, evidence-based argument that speaks to broader debates about the origins, nature and/or implications of political decisions and outcomes is central to Political Science. To hone this skill, all students enrolled in this course pursue independent research in order to produce a final paper at least 15 pages in length. Research and writing tutorials are integrated into the first ten weeks of the course, as are set deadlines for submission of paper topics, bibliographies, thesis statements and outlines, and a complete rough draft. **Style:** 65% Lecture, 25% Discussion, 10% Small Group Activities. **Grading:** 40% mid exam, 50% reports/papers, 10% class participation. **Exam Format:** IDs and essays

**Pol 4463 The Cuban Revolution Through the Words of Cuban Revolutionaries**  
3 credit(s); Meets CLE req of Global Perspectives  
**Instructor:** Nimtz Jr,August H  
**Description:** The history of socialist revolutions over the course of a century or more reveals that what occurred in Cuba has proven to have more lasting power. In spite of all the challenges it continues to face, what explains why the Cuban Revolution is still in place after four decades? This is the central research question of the course. A definitive answer would require a thorough examination of the revolution from its initiation until today, which is beyond what can be done in a semester or its equivalent. The focus, rather, will be more limited. First, how was the revolution made and consolidated, from 1953 until about 1969. Second, how has it been able to survive and advance since the collapse of the Soviet Union, that is, since 1991? The emphasis here is on the role of leadership and strategy and how the Cubans and their leaders saw and see what they are doing, in their own words. This is an attempt to get into their heads, their understandings, through documents, speeches and writings. For the first question I will also draw on the data from a research/film documentary project that I'm involved in at this moment: the participation of women and men in the guerrilla army and underground movement.

**Pol 4473W Chinese Politics**  
3 credit(s); Credit will not be granted if credit has been received for: EAS 4473; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive  
**Instructor:** Kelliher,Daniel R  
**Description:** Don't know anything about China? Like, say, zero? No problem: no background required here. This course starts from scratch, going high-speed through Imperial China and the Chinese Revolution to arrive at the contemporary scene (the focus for most of the course). We'll cover Chinese social structure plus the basics of China's long history of sophisticated political theory, and then see how they both play out in the biggest controversies today: environmental catastrophe, internet censorship, changing sexual morals, international copyright piracy, sex-selective abortion & the missing girls problem, freedom & human rights, changing roles for women and men, corruption & high-profile scandals, tainted food and medicine, religion, grass-roots protest movements, art & cinema, business & Chinese capitalism, the military, espionage, and U.S.-China relations ( with an emphasis on what American behavior looks like to the Chinese). Feedback I've gotten from students about this class: it's hard and it's really fun.
Style: 60% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities.
Grading: 15% mid exam, 15% final exam, 50% reports/papers, 20% class participation.

Pol 4485 Human Rights and Democracy in the World
3 credit(s); One 1xxx or 3xxx course in pol sci Credit will not be granted if credit has been received for: POL 5485; Meets CLE req of Civic Life and Ethics
Instructor: Sikkink, Kathryn A
Description: This class will examine the question of international human rights in theory and practice. We will begin by studying the history of the idea of human rights and the basic human rights treaties and declarations. Next we will explore theoretical explanations for repression and human rights violations, contrasting explanations that focus on economic, political, psychological, and ideological factors. We will devote particular attention to causes of genocide, and look at what other countries might do to prevent future genocide. Each student will be asked to choose and focus on one or two countries that provides cases of repression and human rights violations. In the third part of the class, we will explore how human rights violations could be prevented and what individuals can do to improve human rights situations. In this part of the course, we will examine issues of transitional justice and accountability for past human rights abuses. Do Truth Commissions and trials of leaders for human rights violations help avoid future repression?
Style: 45% Lecture, 35% Discussion.
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.
Exam Format: essay, short answer, and multiple choice

Pol 4489W Citizens, Consumers, and Corporations
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Caraway, Teri L.
Description: Corporations are among the most powerful actors in the global political economy. They employ millions of people, produce a variety of goods, and have massive effects on the ecological and social environments in which they do business. How do ordinary people act in order to hold corporations accountable for the effects that their activities have on communities and individuals? This course focuses on two ways that people have mobilized to counter corporate power— as citizens and as consumers. When people mobilize as citizens, they put pressure on corporations through the political system— e.g. through mass protests, lobbying politicians, and pursuing claims through the courts. When people mobilize as consumers, they use the power of their purchasing decisions to encourage corporations to change their behavior. We will explore these different modes of action through an examination of Wal-mart, branding and corporate social responsibility, labor rights, the environment, fair trade, water privatization, the privatization of life, and outsourcing war.
Style: 40% Lecture, 15% Film/Video, 30% Discussion, 15% Small Group Activities.
Grading: 20% final exam, 60% reports/papers, 20% class participation. Students will write two short essays of 4-5 pages and one research paper, 6-8 pages in length.
Exam Format: The final exam will be an essay exam in which students will answer one question from a list of two or three questions.

Pol 4501W The Supreme Court and Constitutional Interpretation
3 credit(s); Credit will not be granted if credit has been received for: POL 5487; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Gregory, Charles
Description: Student may contact the instructor or department for information.

Pol 4887 Thinking Strategically in International Politics
A-F only, 3 credit(s);
Instructor: STAFF
Description: This course surveys current theories of international relations, and introduces students to elementary game theory. Major topics include the causes of war, the conditions for international cooperation, and the role of international institutions. By the end of the semester, students will be expected to: 1. Understand the relevant international relations literature; 2. Understand simple game-theoretic techniques; 3. Critically analyze theories of international politics; and 4. Understand the general scientific method of theory building and empirical testing. Possible textbooks: Kenneth N. Waltz. 1954. Man, the State, and War; Waltz, Kenneth N. Theory of International Politics; Bruce Bueno de Mesquita, 2000. Principles of International Politics.
Style: Lectures and discussions after each homework is graded.
Grading: 30% mid exam, 40% final exam, 10% class participation, 20% other evaluation. homework
Exam Format: Multiple choice, essay, and short answer are all possible.

Pol 4900W Senior Paper
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Can be attached to any 3XXX or 4XXX course (with the instructor's agreement). A 10-15 page paper is submitted for
Pol 5306 Presidential Leadership and American Democracy
3 credit(s); grad student or instr consent
Credit will not be granted if credit has been received for: POL 3306;
Instructor: Jacobs, Larry
Description: Presidents have been at the center of America’s titanic struggles from battles over slavery and civil rights, Social Security and Medicare to national security and war making. Presidential heroism has been matched, however, by defeats and setbacks from the resignation of Richard Nixon and impeachments of Andrew Johnson and Bill Clinton to the failures of Lyndon Johnson’s war in Vietnam, Ronald Reagan’s drive to permanently reduce the size of government, and George W. Bush’s crusade to partially privatize Social Security and to bring a stable democracy to Iraq. The U.S. presidency is tangled in enduring paradoxes that endemically place the chief executive in a “no win” situation. Journalists and many Americans expect presidents to be both independent leaders that serve the national interest and a democratic force that represents the people against special interests. Presidential efforts to fulfill these multiple and competing expectations and those of their intense supporters not infrequently thrust them into the role of disruptive force one that challenges the country’s social, economic, and political systems. Why do presidents persistently slip into these no-win situations? What are the president’s powers and what constraints do they face? Why has Barack Obama failed to revive the economy and tackle foreign policy? What are the prospects for the next president? This course will trace the political development of the presidency as well as explore its contemporary role in domestic and foreign policy. The course will consider these enduring themes in terms of the presidency’s place in the American constitutional order and its relationship with the mass public, the federal bureaucracy, and Congress.
Style: 40% Lecture, 5% Film/Video, 30% Discussion, 15% Laboratory, 10% Student Presentation. In addition to dynamic, participatory lectures, the course relies on small group tutorials where students work together to critically analyze key puzzles in the presidency.
Grading: 30% mid exam, 40% final exam, 30% reports/papers. Class participation is taken into account where there is discretion.
Exam Format: Short answer and essay.

Pol 5315 State Governments: Laboratories of Democracy
4 credit(s); grad student or instr consent
Credit will not be granted if credit has been received for: POL 4315W;
Instructor: Karch, Andrew Jonathan
Description: This course examines the recent revitalization of political institutions in the American states and the implications of this resurgence for the making of public policy. State governments regulate and tax a wide range of business activities and perform a host of vital services. Even though state governments affect our lives every day, however, they are rarely at the forefront of the minds of the American public. The goals of this course are to introduce you to these important arenas of government and to examine the Minnesota political system in a comparative perspective.
Grading: First midterm (30%) Second midterm (30%) Final exam (40%)

Pol 5485 Human Rights and Democracy in the World
3 credit(s); grad student or instr consent
Credit will not be granted if credit has been received for: POL 4485;
Instructor: Sikkink, Kathryn A
Description: Student may contact the instructor or department for information.

Pol 8060 Research Proseminar in Political Science
S-N only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Karch, Andrew Jonathan
Description: Student may contact the instructor or department for information.

Pol 8106 Quantitative Political Science I
3 credit(s);
Instructor: Goren, Paul Nurullah
Description: Student may contact the instructor or department for information.

Pol 8124 Game Theory
3 credit(s);
Instructor: Hollyer, James
Description: Student may contact the instructor or department for information.

Pol 8126 Qualitative Methods
3 credit(s);
Instructor: Kelliher, Daniel R
Description: This is practical, hands-on training in fieldwork and qualitative methods. It's not about theory. This class shoves you out the door and onto the street, pointed AWAY from the library and your computer. You learn interviewing, observation, narrative interpretation, and practical management of field research. You'll also get training in the ethics of interviewing and how to deal with human subjects committees and the Institutional Review Board (IRB). In the past students in this course have carried out research in dozens of different fieldwork settings across all of the diverse communities available in the Twin Cities area. Students from all departments are welcome. Questions? Call me: Daniel Kelliher, 612-624-1671, or email: kelliher@umn.edu

**Pol 8160 Topics in Models and Methods: Political Experiments: Design and Analysis - I**  
1-3 credit(s), max credits 12, 4 completions allowed;  
Instructor: Freeman, John Roy  
Description: Student may contact the instructor or department for information.

**Pol 8160 Topics in Models and Methods: Event History**  
1-3 credit(s), max credits 12, 4 completions allowed;  
Instructor: Freeman, John Roy  
Description: Student may contact the instructor or department for information.

**Pol 8225 American Political Thought**  
3 credit(s);  
Instructor: Beaumont, Elizabeth  
Description: Student may contact the instructor or department for information.

**Pol 8252 Early Modern Political Thought**  
3 credit(s);  
Instructor: Tronto, Joan C  
Description: Student may contact the instructor or department for information.

**Pol 8260 Topics in Political Theory: Transatlantic Political Thought**  
3 credit(s), max credits 6;  
Instructor: Vazquez-Arroyo, Antonio Y  
Description: After 1968, intellectually the dialectical legacy had collapsed, at least in the Euro-Atlantic world. In the first half of the twentieth century, Georg Lukacs's History and Class Consciousness (1920) had commanded the field; and in the early sixties, Jean-Paul Sartre's unfinished Critique of Dialectical Reason (1960) had resonance, even if the onset of structuralism and post-structuralism in France led to either viscous attack or virtual indifference. Aside from Sartre's, the only other master work to have sought to formulate an original account of the dialectic was Theodor W. Adorno's Negative Dialectics (1966). But rather than providing a source of renewal, it instead became become the dialectic's lapidary statement. Yet by the end of the last century this trend had changed. Fredric Jameson and Slavoj Zizek have arguably become the two most successful and original thinkers who have reworked the dialectical legacy in a post-political age. While working within the parameters of the dialectical legacy, at once dialectically resisting and recasting the Hegelian and Adornian formulations, these thinkers have provided formulations of the dialectic akin to the challenges of the present. Out of the two, Jameson's Valences of the Dialectic (2009) provides the most sustained reflection on the dialectic to date. This seminar will explore this legacy by considering some of its key works and how these intersect with some of the most preeminent political and theoretical questions today. The main thread weaving all the thematics of the seminar will be a rather straightforward question: What is the political and critical import of recasting the dialectic today? To ponder this question we will pursue in-depth, immanent readings of the following thinkers: Hegel, Marx, Lukacs, Sartre, Adorno, and Jameson.

**Pol 8301 American Politics**  
3 credit(s), max credits 4, 1 completion allowed;  
Instructor: Johnson, Timothy Russell  
Description: Student may contact the instructor or department for information.

**Pol 8307 Proseminar in Political Psychology I**  
S-N only, 2 credit(s); Grad pol sci major or pol psych minor or instr consent Credit will not be granted if credit has been received for: PSY 8211;  
Instructor: Lavine, Howard G  
Description: Student may contact the instructor or department for information.

**Pol 8312 Legislative Process**  
3 credit(s);
Instructor: Pearson, Kathryn Lynn
Description: Student may contact the instructor or department for information.

Pol 8460 Topics in International Relations: Theoretical Approaches to Human Rights
3 credit(s), max credits 6;
Instructor: Sikkink, Kathryn A
Description: Student may contact the instructor or department for information.

Pol 8641 Comparative Mass Political Behavior
A-F only, 3 credit(s);
Instructor: Rahn, Wendy Marie
Description: Student may contact the instructor or department for information.

Pol 8660 Topics in Comparative Politics: Democratization
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Samuels, David Julian
Description: Title: Democracy and Democratization This seminar considers some of the oldest and most important questions in comparative politics. What is democracy? What are the sources of democratic and non-democratic rule, and what factors promote authoritarian and democratic regime stability and/or change? We will explore research from all major political science approaches to these and related questions. Readings are selected for their theoretical and/or conceptual importance; the seminar does not focus on any particular region of the world. The seminar will be organized around the following main themes: 1) Philosophical traditions, emergence of key concepts 2) Typologies of regimes - empirical referents 3) The rise of the state and sources of democratic and authoritarian rule 4) Processes of regime decay and/or collapse
Style: 25% Lecture, 60% Discussion, 15% Student Presentation.
Grading: 50% reports/papers, 25% reflection paper, 25% class participation.

Portuguese 206 Eddy Hall

Port 1101 Beginning Portuguese
5 credit(s);
Instructor: STAFF
Description: Introduction to Portuguese: speaking and understanding, pronunciation, reading and writing, basic grammar, cultural aspects of the language and Portuguese-speaking countries (Portugal, Brazil, Mozambique, Angola, Cape Verde, Guinea Bissau, and Sao Tome and Principe).

Port 1103 Intermediate Portuguese
5 credit(s);
Instructor: STAFF
Description: Intermediate Portuguese: Speaking and comprehension, development of reading and writing skills based on Portuguese-language materials, cultural and linguistic aspects of Portuguese-speaking countries (Portugal, Brazil, Mozambique, Angola, Cape Verde, Guinea Bissau, and Sao Tome and Principe).

Port 1904 Freshman Seminar: Brazil: Short Stories from Country of the Future
3 credit(s), max credits 6; Meets CLE req of Global Perspectives
Instructor: Beal, Sophia Funkhouser
Description: Student may contact the instructor or department for information.

Port 3001 Portuguese for Spanish Speakers
4 credit(s);
Instructor: STAFF
Description: Study of Portuguese based on student knowledge of Spanish (speakers of other Romance languages are allowed with instructor permission). Contrastive approach to the phonic and morpho-syntactic structures of Portuguese. Cultural components will focus on Brazil, Portugal, and/or Portuguese-speaking Africa.
Style: 20% Lecture, 60% Discussion. in-class writing
Grading: 15% mid exam, 20% final exam, 20% reports/papers, 10% quizzes, 15% in-class presentation, 20% class participation.

Port 3003 Portuguese Conversation and Composition
4 credit(s);
Instructor: STAFF
Description: This course will focus on grammar review through practical activities in order to encourage conversation. There will also be readings, films/videos, and discussions that will center on Brazilian and/or Portuguese, and/or Lusophone African cultures. The main objective is for students to improve all four language skills (comprehension, reading, speaking, and writing).

Port 3501W Global Portuguese I
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Beal, Sophia Funkhouser
Description: Student may contact the instructor or department for information.

Port 5910 Topics in Lusophone Cultures and Literatures
3 credit(s), max credits 9, 3 completions allowed;
Instructor: STAFF
Description: This course will proceed from the analysis of a set of interdisciplinary axes of inquiry. The first comprises the theory of violence, including elements from Sociology, Anthropology, Philosophy and Psychoanalysis, considering important recent conceptual debates. The second tackles authoritarianism, considering specifically how post-dictatorial societies deal with social contradictions. The third considers the role of freedom of speech in Democracy. It is expected that the course contribute to debates on contemporary violence, including perspectives dedicated to human rights, individual freedom, terror and fascism. The approach will include the study of concrete examples, articulating theory and analysis. Some of these examples will be related to Latin America, especially Brazil. Some classes will be dedicated to Cultural issues, connecting the main axes to film, music, fine arts and literature. Oral presentations, a book review, a conference paper proposal, an annotated bibliography and a final, original research paper of 15-20 pages. Papers may be written in Portuguese, Spanish or English.

Port 5970 Directed Readings
3 credit(s), max credits 9, 3 completions allowed;
Instructor: STAFF
Description: Lusophone Studies (Portuguese-speaking Africa, Brazil and Portugal) Thematic areas not covered in other courses. Students submit reading plans for particular topics, figures, periods or issues.

Port 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Ferreira, Ana Paula
Description: Student may contact the instructor or department for information.

Postsecondary Teaching and Learning 206 Burton Hall

PsTL 722 Introductory Algebra (Computer)
0 credit(s);
Instructor: Robertson, Douglas Frederick
Description: A first course in algebra taught using computer-mediated instruction. You will learn new material using interactive multimedia computer software. There are no lectures. You will be on the computer 70% of each class period. The rest of the time you will be working on algebra problems, taking exams, and working individually with the instructor. This course is not self-paced; you must follow a set schedule for checkpoints, homework, and exams. Course covers concepts and procedures of elementary algebra at a level of difficulty and abstraction geared for students enrolled at a research university. To be successful you must enter the course able to work with whole numbers, fractions, decimals, and percents. Course content includes real number (signed number) operations, equations, inequalities, absolute value, rectangular (x-y) graphs, systems, exponents, polynomials, factoring, rational expressions and equations, and word problems. Hourly time commitment per week: Class: 4, Reading: 1, Writing: 0, Studying: 2, Homework: 8. Homework assignments ask you to work 10-40 problems each class day. Testing includes daily checkpoints (one question mini-quizzes), several 50 minute closed-book exams and a two hour comprehensive final. Course prepares you for Intermediate Algebra, PsTL 0732.
Style: 30% Discussion, 70% Web Based. Computer-mediated instruction, working on problems, interacting with instructor.
Grading: 50% mid exam, 30% final exam, 10% quizzes, 10% written homework.
Exam Format: Algebra problems to solve (e.g. Solve this equation); Exams are closed book but calculators are allowed.

PsTL 732 Intermediate Algebra (Computer)
0 credit(s); 4 cr equiv or grade of at least C in [0713 or 0717 or 0721 or 0722] or General Math Placement Test credit will not be granted if credit received for: 0618, 0625, 0631, 0731, 1443, 1444, 1445, 1446Credit will not be granted if credit has been received for: PsTL 731;
Instructor: Robertson, Douglas Frederick
**PsTL 1004 Statistics**

4 credit(s); Meets CLE req of Mathematical Thinking  
Instructor: Loch, Suzanne Yvette  
**Description:** This course is an introduction to statistics that emphasizes problem solving and decision making through the collection, analysis, and interpretation of data. Course topics include the organization and presentation of data, summary statistics, sampling methodology, sampling distributions, probability, estimation, correlation, hypothesis testing, contingency tables, and chi-square analysis. The instructional approach includes the use of small active learning groups, computer statistics software, computer simulations, in-depth projects, writing assignments, demonstrations, and lots of discussion and problem solving based on practical examples. Students learn how to analyze and interpret quantitative information, to use statistical thinking, and to communicate using the language of statistics. Students will develop a level of statistical literacy that enables them to critically assess information encountered in the media and other sources. This course will be of particular interest to undergraduate non-majors who want to fulfill the CLE requirement in Mathematical Thinking.  
**Style:** 40% Lecture, 9% Discussion, 50% Small Group Activities, 1% Student Presentation.  
**Grading:** 20% reports/papers, 10% quizzes, 60% additional semester exams, 10% problem solving. The 10% of the course grade for problem solving involves course work done in the classroom - most assignments will be found in the course packet.  
**Exam Format:** Exams are a combination of short answer questions, calculations and graphing, and multiple choice questions.

**PsTL 1006 Mathematical Modeling and Prediction**

3 credit(s); [Three yrs high school math or grade of at least C+ in [0731 or 0732]] or placement test score or instr consent  
Credit will not be granted if credit has been received for: MATH 1031; Meets CLE req of Mathematical Thinking  
Instructor: Stottlemyer, Janet  
**Description:** This course is a mathematical thinking course that primarily uses mathematical models to describe real world data and demonstrate the uses of mathematical manipulations. Data are described by a mathematical model and a graphical rendering. These models are then used to make predictions. Applications of linear, polynomial, exponential and logarithmic functions will be explored.
Probability will also be introduced. Students will develop algebraic and critical thinking skills while observing and analyzing the behavior of real-world data. The foundations of counting and probability will be integrated into the modeling activities. When students have successfully completed this class, they will be able to develop, select, and fine-tune equations and use probabilities to represent a wide variety of situations using real-world applications and applying a model to the data with mathematics, both equations and graphs. There will be lecture, computer-assisted learning, computer demonstrations, individual in-class work, and small group work in the class.

**Style:** 40% Lecture, 10% Laboratory, 10% Demonstration, 40% Web Based.

**Grading:** 20% final exam, 36% special projects, 8% quizzes, 8% written homework, 28% additional semester exams.

**PsTL 1006 Mathematical Modeling and Prediction**

3 credit(s); [Three yrs high school math or grade of at least C+ in [0731 or 0732]] or placement test score or instr consent
Credit will not be granted if credit has been received for: MATH 1031; Meets CLE req of Mathematical Thinking
Instructor: Staats, Susan K
Description: Students use algebra to create equations and graphs that describe real-world data and situations. Students learn to use these mathematical models to make predictions, to evaluate error and to link observed phenomena with algebraic processes. The course focuses on applications of linear, polynomial, rational, exponential, logarithmic and logistic equations. In this section of 1006, students can complete about 15% of the class credit through service learning. The service learning component is optional, not required.

**PsTL 1051 Editing for Writers**

2 credit(s);
Instructor: Rojas Collins, Molly C
Description: 1051 is an editing class for non-native speakers of English in which students are guided in how to analyze their writing in order to understand their own patterns of error. Explicitly focused on language.

**PsTL 1081 Integrated Learning in the Social Sciences**

A-F only, 2 credit(s), max credits 4;
Instructor: Liu, Shiyu
Description: Student may contact the instructor or department for information.

**PsTL 1082 Integrated Learning in the Sciences**

A-F only, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: Osifuye, Shade Ashley
Description: Student may contact the instructor or department for information.

**PsTL 1112 Nature in the City**

4 credit(s); Meets CLE req of Biological Sciences; meets CLE req of Environment
Instructor: Hatch, Jay Tudor
Description: Student may contact the instructor or department for information.

**PsTL 1131 Principles of Biological Science**

4 credit(s); Meets CLE req of Biological Sciences
Instructor: Hatch, Jay Tudor
Description: This is a learner-centered introductory level course that guides you toward developing your own understanding of the preeminent principles of biology, including Ecology, Biodiversity, Evolution, Genetics, Cell Theory, and the Molecular Basis of Life. But, we strive to have you do so in the context of your own daily living, being ever mindful that all living things are connected in an intricate web of life, and that how you live your life affects the nature of that web. So, how do we begin? By asking questions and developing answers. Here's some questions we'll try to answer from a scientific point of view (and don't worry, you'll get to ask and answer your own questions as well). Who are you? Are we alone in the universe? Want to have a clone? Is there really such a thing as race? Are you only as smart as your genes? Is creationism an alternative to evolution? Is the earth warming? Are we creating a biodiversity crisis? Is social justice possible? How might a shark save my life? We will spend much of our time in the classroom working on small-group activities designed to develop answers to the questions based on what we already know (or think we do) and new knowledge that we are constructing. Sometimes there will be short (10-minute) lectures to help out with difficult concepts; and always we will take time to write about what we understand, how we came to understand it, and what we still don't understand. In the laboratory, you will work in cooperative pairs, focusing on the process of science; that is, how scientists go about observation, formulating questions, transforming the questions into hypotheses, testing the hypotheses, collecting data, organizing and interpreting the data, drawing conclusions, and communicating their work to the world. There is no dissection of organisms in this course.

**Style:** 20% Lecture, 20% Discussion, 30% Laboratory, 30% Small Group Activities.

**Grading:** 16% mid exam, 17% final exam, 16% special projects, 17% class participation, 33% laboratory evaluation. Lab scoring based on weekly quiz, lab reports, written homework, and one problem set.
PsTL 1135 Essentials of Human Anatomy and Physiology
4 credit(s); Meets CLE req of Biological Sciences
Instructor: Jensen, Murray Stowe
Description: PSTL 1135, Essentials of Human Anatomy and Physiology, is a biological science course, with laboratory, designed to introduce college freshmen to scientific thinking and career exploration in health care, kinesiology, or other areas in the life sciences. The course is organized around body systems, e.g., the respiratory system, the nervous system, etc., and uses both fitness and disease, (e.g., diabetes, cancer, atherosclerosis, etc.) to introduce students to essential concepts in anatomy and physiology. The lecture section of the course does not meet in a lecture hall, but rather in an active learning classroom that features nine-person round tables. In this setting students will work in groups to solve problems and work on projects. In the laboratory, student engage in traditional dissections, e.g., brains, hearts, etc., perform inquiry-based exercises, and participate in other hands-on activities. Cooperative learning activities, e.g., cooperative quizzes, are used in both the lecture and the lab settings of the course. All students enrolled in PSTL 1135 will be required to read at least one, and maybe two books, such as "When the Air Hits Your Brain," outside of regular class time. The course will make considerable use of internet-based curricular materials. Please note, this is not the first semester of a two semester anatomy and physiology course, but rather a one semester survey course designed for freshman.
Style: 20% Lecture, 20% Discussion, 30% Laboratory, 20% Small Group Activities, 10% Student Presentation.
Grading: 30% final exam, 10% quizzes, 30% additional semester exams, 30% laboratory evaluation.

PsTL 1163 Physics by Inquiry
4 credit(s); Meets CLE req of Physical Sciences
Instructor: Hsu, Leon
Description: This is a lecture-lab course that will focus on physical science content and the nature of science and learning. By the end of the semester, students should have developed a deeper understanding of both physical science content and the nature of science and of learning science. Physical science content: Students will explore physics and chemistry ideas that can be used to explain interesting phenomena, including: the relationship between force and motion; the nature of energy, energy transformations, and conservation of energy; and the small particle theory of matter. The nature of science and of learning science: Students will learn the process by which knowledge is developed within a scientific community: that doing science involves using evidence and creative thinking; that knowledge is established through collaboration and consensus; and that science knowledge can change over time. You will also learn about the differences between models, theories, and laws. Finally, you will also become more aware of how your own science ideas change and develop over time.
Style: 50% Lecture, 10% Discussion, 40% Laboratory.
Grading: 18% final exam, 27% quizzes, 20% written homework, 10% class participation, 20% laboratory evaluation, 5% other evaluation.
Exam Format: About half multiple choice and half free response with explanations

PsTL 1171 Earth Systems and Environments
4 credit(s); Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Lascu, Ioan
Description:

PsTL 1204 Ways of Knowing in the Social Sciences
A-F only, 4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Woodbury, Shawn Michael
Description: Student may contact the instructor or department for information.

PsTL 1211 Multicultural Perspectives in Sociology
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Kelly, Margaret Ellen Delehanty
Description: This course is an introduction to sociological thinking and methods of research. We will explore areas of human interaction that include socialization, culture, stratification and inequality (on the basis of race, class, and gender) social control, and social change. During the semester we will explore these and other topics in an overview of major ideas associated with classical and modern social thought. The purpose of this course is to provide you with the basic tools to better understand (and question) our ideas, and our social world. Through the readings, we will contest everyday understandings of social issues to understand the ways in which different aspects of social life systematically differentiate by privileging and disadvantaging our participation in society. Service Learning will be required in this course.
Style: 30% Lecture, 30% Discussion, 30% Small Group Activities, 5% Student Presentation, 5% Service Learning.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 15% special projects, 5% written homework, 5% attendance, 5% in-class presentation, 10% class participation.
PsTL 1231 U.S. History: Multicultural Perspectives
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Stahl, Jason Michael
Description: PSTL 1231 is a collaborative learning experience where students are asked to see the American past as an ongoing conversation and debate?one which is inherently tied to present-day political realities. Along with some traditional lecture, the bulk of the course is designed to facilitate discussion based on both primary and secondary sources. Students will read and discuss the meaning of historical documents authored by individuals and groups who have been marginalized from dominant American culture, society and politics. In addition to these primary source texts, students will gain a deeper understanding of the American past by analyzing interpretations of history by present-day historians. Through this work, students will gain a better understanding of the practice of history and a better understanding of what it has meant and what it means to be American.?
Style: 30% Lecture, 20% Film/Video, 25% Discussion, 25% Small Group Activities.
Grading: 75% reports/papers, 25% class participation. Grade is composed of: 4 Papers; In-Class Work

PsTL 1246 Multicultural Contexts: Engaging Citizenship and Democracy
3 credit(s); No CLA students Credit will not be granted if credit has been received for: PSTL 1235W; Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences
Instructor: Poch, Robert Karl
Description: The Greeks defined the term "citizen" as a person who was knowledgeable and engaged in society and politics. The central question we will explore in this course is how to be an engaged citizen in a multicultural democracy. Using multiple lenses of history, law, psychology and sociology, this course examines the role of individuals and groups in shaping the nature of citizenship and public ethics in U.S. society. Using social science texts, historical narratives, literature, and legal cases, the course explores the nature of legal and personal responsibility with particular attention to race, class, gender and civil rights. In addition, to learn how the adversarial system works (or doesn't work!) all students will participate in a full mock jury trial.
Style: 45% Lecture, 10% Film/Video, 25% Discussion, 20% Small Group Activities.
Grading: 20% written homework, 20% class participation. 3 tests -- each worth 20%
Exam Format: Essays -- select 8 questions from 10-12 potential questions
PsTL 1251 Global History and Culture

4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives

Instructor: Arendale, David R

Description: This Course Fulfills Two Graduation Requirements: CLE Diversified Core: Historical Perspectives CLE Designated Theme: International Perspectives Textbook: None. Use free online articles and audio files Course Overview This course examines the 20th and 21st centuries to examine ideas that influenced development of global, political, social, and economic systems. This course explores world civilizations by placing historical events, customs and cultures in a global context. Use of historical documents, computer resources, historical simulations, texts, film documentaries, small group discussions, and lecture presentations are create a comprehensive view of major world cultures. This course provides a balanced exploration of world history during the past 100 years. The course develops major concepts such as nationalism, democracy, colonialism, liberalism, socialism, communism, and fascism while tracing their impact on Europe, Asia, Africa, and the Americas. Major questions include: What are the forces that guide history as it unfolds? How does today’s news headlines connect with the past? Is it possible to predict the near future and make personal plans as a result? Exploring these questions helps to make sense out of history and connect “then and now.” Current events include ethnic conflicts, the breakup of the Soviet Union, the modernization of Japan, China, and India, Arab/Israeli disputes, nation building in Africa, neo-colonialism and trade dependence in developing countries. Technology: The Moodle companion web site is the go to place for downloading readings, listening to audio files, and watching video files assigned to the class. There is no textbook to purchase. Instead, it has been replaced with free online materials. All critical course materials (study guides, lecture outlines, readings, information links) are available here. An additional feature of this course is integrating the use of blogs, wikis, and podcasting into the course. As a class we construct a weekly audio podcast that features a review of the history topics as well as include music selected by students. Check out the podcast at http://thenandnow.org It can be subscribed through iTunes. You can also sample the podcast by clicking on the web link on that web page. Also, the class will construct online its own study guide for the major exams. Check out the website at http://myworldhistory.org There are other history simulations and media activities we engage and use. Final Words History is all around us. We observe it as well as help to create it. The only way to study history is to hold your class notes in one hand and today’s newspaper in the other. This class is about creating connections among what we read in class with today’s newspaper headlines. It is about making sense out of a world that sometimes seems not to make very much sense at all. I hope that you decide to join us in the class.

Style: 45% Lecture, 15% Film/Video, 15% Discussion, 20% Small Group Activities, 2% Field Trips, 3% Web Based.

Grading: 20% mid exam, 20% final exam, 10% reports/papers, 10% special projects, 10% quizzes, 20% additional semester exams, 5% reflection paper, 5% class participation. Study guides for major exams created by students in the class and also provided by the course instructor. Also the course instructor and the enrolled students coproduce a weekly podcast that reviews the textbook chapter and class lectures.

Exam Format: Major exams have three parts: matching vocabulary, multiple-choice, and essay questions.

PsTL 1281 Principles of Psychology

4 credit(s); Have not received college credit for intro psych; No CLA students w/ 60+ credits Credit will not be granted if credit has been received for: PSY 1001; Meets CLE req of Social Sciences

Instructor: Wambach, Cathrine A

Description: PSTL 1281 is an introductory psychology course. It is equivalent to Psy 1001 and introductory psychology courses offered at other colleges and universities. You should not take this course if you have already received college credit for introductory psychology. The course includes content required for future study in psychology, business, education and health sciences. The content of the course includes terminology, theories and the results of research from the major areas of research and practice including sensation, perception, cognition, motivation, emotion, learning, personality, abnormal behavior, therapeutic practices, health and social behavior.

Style: 50% Lecture, 25% Small Group Activities. 25 quizzes

Grading: 15% final exam, 5% reports/papers, 60% quizzes, 10% written homework, 10% attendance.

Exam Format: multiple choice

PsTL 1281 Principles of Psychology

4 credit(s); Have not received college credit for intro psych; No CLA students w/ 60+ credits Credit will not be granted if credit has been received for: PSY 1001; Meets CLE req of Social Sciences

Instructor: Grier-Reed, Tabitha LaShaun

Description: PSTL 1281 is an introductory psychology course. It is equivalent to Psy 1001 and introductory psychology courses offered at other colleges and universities. You should not take this course if you have already received college credit for introductory psychology. The course includes content required for future study in psychology, business, education and health sciences. The content of the course includes terminology, theories and the results of research from the major areas of research and practice including sensation, perception, cognition, motivation, emotion, learning, personality, abnormal behavior, therapeutic practices, health and social behavior.

Style: 20% Lecture, 20% Film/Video, 20% Discussion, 30% Small Group Activities, 10% Student Presentation. The nature of this class
PsTL 1312 Creating Identities Through Art and Performance
4 credit(s); Meets CLE req of Arts/Humanities
Instructor: Dorsey, Heather Jane
Description: Creating Identities Through Art and Performance provides instruction, practice and delivery in creating and exploring art in different mediums. Through theatrical texts, performances, painting, photography, film, music and sculpture, we will explore personal, social, and cultural identities. By creating art, you gain first-hand experience in thinking like an artist, and by critiquing your own and others’ artwork, you gain first-hand experience in thinking like a critic. There are no prerequisites for this course. You do not need previous art or performance experience to do well. In this course, you will examine concepts such as place, self, and identity. We will examine our collective stories and shared experiences by attending live performances, museums, tours, and other experiential activities.

PsTL 1312 Creating Identities Through Art and Performance
4 credit(s); Meets CLE req of Arts/Humanities
Instructor: Frederickson, Tina
Description: PsTL 1312 is an arts and humanities course that provides you with the opportunity to create, analyze, and understand how the creative process can reveal our cultural identity as an individual and as a community. This particular section of 1312 helps you explore identity and the creative process by focusing on developing an understanding and appreciation of the performing arts (theatre arts, oral interpretation of literature, storytelling/spoken word) from the perspective of critical viewer and creative participant. To that end, however, there is much overlap from other artistic mediums such as creative writing, visual art, dance, and music to infuse and enrich the creative experience as we explore the theme of Identity. No prior experience in any particular artistic medium is needed, only the ability to be open and receptive, willing to explore and release your creative artistic voice.
Style: 5% Lecture, 5% Film/Video, 20% Discussion, 20% Small Group Activities, 30% Student Presentation, 10% Field Trips, 10% Studio.
Grading: 20% reports/papers, 10% special projects, 20% written homework, 10% attendance, 10% journal, 25% in-class presentation, 5% class participation.

PsTL 1365W Literatures of the United States: Multicultural Perspectives
4 credit(s); No CLA students
Credit will not be granted if credit has been received for: PSTL 1366; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Hyland, Ezra St
Description: Student may contact the instructor or department for information.

PsTL 1366 Literatures of the U.S.: Multicultural Perspectives
3 credit(s); No CLA students
Credit will not be granted if credit has been received for: PSTL 1365W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature
Instructor: Rojas Collins, Molly C
Description: This course uses a range of interactive activities and assignments to critically engage students with a variety of forms of literature that explore the diversity of experience and identity amongst individuals and communities in the United States. Through collaborative and interactive work with literary texts, students investigate the ways that literature works to illuminate power, privilege, and identity in society at the same time that it invites us to probe our own position and experience within that society. Students study formal elements of literature, the social and political contexts that shape and inform the literature, and consider their own experience in relation to these constructs. Through this work, students develop a deeper understanding of the meaning and function of literature as a way of engaging critical and creative perspectives on the human experience.
Grading: 40% mid exam, 40% reports/papers, 10% quizzes, 5% attendance, 5% in-class presentation.

PsTL 1366 Literatures of the U.S.: Multicultural Perspectives
3 credit(s); No CLA students
Credit will not be granted if credit has been received for: PSTL 1365W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature
Instructor: Hyland, Ezra St
Description: Introduction to U.S. literatures is designed to raise a range of questions about American identity within broad social, historical, political, and literary contexts while highlighting the diversity of form, perspective, and style in U.S. literature. Course emphasizes literary analysis, fostering student development of critical analysis and interpretation through close reading of texts, class discussion, and formal and informal writing assignments.
PsTL 1368 Literatures of the World: International Perspectives
3 credit(s);No CLA students
Description: This course uses a range of activities and assignments to critically engage students with a variety of forms of literature that explore the dynamics of human relationships and social change in global contexts. Through collaborative and interactive work with literary texts, students investigate the ways that literature works to illuminate individual struggles and the relationship of these struggles to larger global social forces. Students study formal elements of literature, the social and political contexts that shape and inform our reading of literature in international settings, and consider their own experience in relation to these constructs. Through this work, students develop a deeper understanding of the meaning and function of literary works and of the global society in which we live. Students gain an appreciation of how literature engages and represents the human experience in creative and critical ways.

Style: 10% Lecture, 60% Discussion, 30% Student Presentation.
Grading: 25% mid exam, 60% reports/papers, 10% quizzes, 5% in-class presentation.

PsTL 1368 Literatures of the World: International Perspectives
3 credit(s);No CLA students
Description: In PsTL 1368, "Literatures of the World: International Perspectives," students will be introduced to short stories, poems, and novels from writers across the globe, written primarily during this current century. We will also listen to music and view art and films that help us to understand the cultures, landscapes, and political conditions that shape these texts. Students will become familiar with literary terms and analysis, and will engage with the stories in ways that enrich their own lives, as well as introduce them to other traditions and cultures. Students will meet in face-to-face classes several times throughout the semester, and the rest of the coursework will occur online. The community of learners that will emerge in the face-to-face classes will continue virtually through interactive, engaged assignments.

Style: 10% Lecture, 5% Film/Video, 5% Discussion, 10% Small Group Activities, 10% Student Presentation, 60% Web Based. This is a hybrid course, which means it is a combination of face-to-face classes and online (web-based) classes.
Grading: 15% mid exam, 15% final exam, 10% reports/papers, 10% quizzes, 10% written homework, 10% attendance, 5% reflection paper, 15% in-class presentation, 10% class participation.

PsTL 1368 Literatures of the World: International Perspectives
3 credit(s);No CLA students
Description: "Migrations" From the Dominican Republic to New Jersey; from Kuwait to Palestine to Egypt to Greece; Vietnam to Laos to Minnesota; Africa to the Caribbean to Britain; Pakistan to California; these are the incredible journeys characters make in the stories, plays, and memoirs we will read together in PsTL 1368 Literatures of the World. Far surpassing geographic shifts, the experience of migration challenges narrators; ideas of home, history, and identity. This course invites you to accompany a diverse group of characters, and to challenge yourself--as they are challenged--to explore the fearsome, exhilarating, and unpredictable boundaries of the nation and the self. Classroom will be interactive and discussion-based, with an emphasis on participation and teamwork. Expect to hone reading, listening, and analytic skills, as well as intercultural communication competence.

PsTL 1461 Multicultural Perspectives in Public Speaking
3 credit(s);No CLA students w/ 60+ credits
Description: The purpose of this course is to introduce the student to the field of Speech Communication; to show basic theories of communication; illustrate the complicated process that is communication; and demonstrate that, through conscious choices, the student can significantly impact the effectiveness of communication. This course will aid the student in the development of communication skills and allows for assessment of personal strengths, weaknesses and barriers to communication. This, ultimately, will prepare the student to be a better communicator.

PsTL 1461 Multicultural Perspectives in Public Speaking
3 credit(s);No CLA students w/ 60+ credits
Description: This course is designed to develop an understanding of the fundamental principles and processes of face-to-face human communication, with the multicultural component coming from each student as they present speeches of personal and social relevance. Primary focus is on public communication; providing practical public speaking experiences and opportunities to analyze this
rhetorical art. Emphasis is placed on frequent in-class presentations, critical and creative thinking, group activities and discussions, and increasing the awareness of the ethical obligations we have as a speaker and listener. * Please note - Sections 7 & 8 will focus on Environmental/Sustainability Issues as a point of general conversation, research, and focus of two major speeches. No prior knowledge is required.

**Style:** 15% Lecture, 2% Film/Video, 18% Discussion, 20% Small Group Activities, 45% Student Presentation.

**Grading:** 9% mid exam, 11% final exam, 18% written homework, 7% attendance, 53% in-class presentation, 2% class participation.

PsTL 1485 Creativity: Photography

**Description:** This introductory course explores conceptual, technical, and historical aspects of photography as an art form. Emphasis is on the creative process through hands-on experience as students learn about camera control, film development, enlarging, and printing in a photographic darkroom. Students receive instruction and support through individual and group discussion and critiques as they work to create a portfolio of their own images. Course includes required lab time in addition to scheduled class times. Students must have a film based camera, (35mm with adjustable controls preferred).

**Style:** 30% Lecture, 20% Discussion, 50% Laboratory.

PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing

**Description:** Student may contact the instructor or department for information.

PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing

**Description:** All PSTL 1525W classes share the following common features: small classes taught by one instructor that meet twice a week and large Friday team-taught classes, a guiding question How can one person make a difference?, a common book, and a core iPad project. While each section of the course explores the common question through different means, all FYI students will read the book The Other Wes Moore and attend two common book events: a panel discussion on the pathways for youth (Friday, October 26 at 9:45 in the McNamara Alumni Center) and a public talk with the author Wes Moore (Tuesday, October 30 at 7pm at the Ted Mann Concert Hall). Students will work collaboratively on an assignment using the iPad to demonstrate learning and development outcomes. You will volunteer in at a local community organization that supports youth for 20 hours during this semester. This service learning is central to this course. We chose to put this service requirement at the center of the course for a number of reasons: to help connect University students to local communities, to relate the academic content of the course to the real world, and to provide a concrete experience to help us answer the question How Can One Person Make a Difference? in a deep and meaningful way. As you engage in community service over the semester, you will also read The Other Wes Moore and study how a variety of scholars from different fields have grappled with questions of inequality, adversity and resilience in different realms of life in America: in schools, in the legal system, in families, neighborhoods and housing, and in employment. What are the challenges that young people from disadvantaged backgrounds face growing up in the United States -- and in the Twin Cities -- today? How should we respond? Obviously, in our class we hope you learn new content?that is, we hope you learn new things about the relationship of individuals and communities to major social institutions in the United States, how institutions support or fail to support individual and community growth and development. We hope you will explore new ideas related to your own identity and social relationships, and that the service component of the course will broaden and deepen your perspective and response to the world you live in. Ultimately, we believe this will make a positive difference in your own development and college career. An integral part of the content and experience of the course is how you learn to think, read, write and interact in new ways. We want you to leave this class with a better understanding of what it means to think, write, and read in a university setting. We want you to be able to critically examine the arguments contained in academic writings; to apply those arguments to your own experience and to the common book; and to get lots of practice writing persuasively in an academic setting.

**Style:** 20% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 20% Service Learning.

**Grading:** 50% reports/papers, 10% special projects, 10% quizzes, 5% attendance, 10% journal, 10% reflection paper, 5% class participation.

PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing

**Description:** Energy...Illuminated! Energy makes things happen. In a scientific sense, converting fuel into energy enables our work, our leisure activities, and our use of everyday manufactured objects. Failing resources and rising pollution, however, require societies...
PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Kelly, Margaret Ellen Delehanty
Description: All PSTL 1525W classes share the following common features: small classes taught by one instructor that meet twice a week and large Friday team-taught classes, a guiding question How can one person make a difference?, a common book, and a core iPad project. While each section of the course explores the common question through different means, all FY1 students will read the book The Other Wes Moore and attend two common book events: a panel discussion on the pathways for youth (Friday, October 26 at 9:45 in the McNamara Alumni Center) and a public talk with the author Wes Moore (Tuesday, October 30 at 7pm at the Ted Mann Concert Hall). Students will work collaboratively on an assignment using the iPad to demonstrate learning and development outcomes. You will volunteer in at a local community organization that supports youth for 20 hours during this semester. This service learning is central to this course. We chose to put this service requirement at the center of the course for a number of reasons: to help connect University students to local communities, to relate the academic content of the course to the "real world?, and to provide a concrete experience to help us answer the question How Can One Person Make a Difference? in a deep and meaningful way. As you engage in community service over the semester, you will also read The Other Wes Moore and study how a variety of scholars from different fields have grappled with questions of inequality, adversity and resilience in different realms of life in America: in schools, in the legal system, in families, neighborhoods and housing, and in employment. What are the challenges that young people from disadvantaged backgrounds face growing up in the United States -- and in the Twin Cities -- today? How should we respond? Obviously, in our class we hope you learn new content!!that is, we hope you learn new things about the relationship of individuals and communities to major social institutions in the United States, how institutions support or fail to support individual and community growth and development. We hope you will explore new ideas related to your own identity and social relationships, and that the service component of the course will broaden and deepen your perspective and response to the world you live in. Ultimately, we believe this will make a positive difference in your own development and college career. An integral part of the content and experience of the course is how you learn to think, read, write and interact in new ways. We want you to leave this class with a better understanding of what it means to think, write, and read in a university setting. We want you to be able to critically examine the arguments contained in academic writings; to apply those arguments to your own experience and to the common book; and to gets lots of practice writing persuasively in an academic setting.
Style: 20% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 10% Guest Speakers, 20% Service Learning.
Grading: 50% reports/papers, 10% special projects, 10% quizzes, 5% attendance, 10% journal, 10% reflection paper, 5% class participation.

PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Jehangir PhD, Rashne Rustom
Description: Energy...Illuminated! Energy makes things happen. In a scientific sense, converting fuel into energy enables our work, our leisure activities, and our use of everyday manufactured objects. Failing resources and rising pollution, however, require societies to consider using energy in more sustainable ways. In a humanistic sense, energy defines our lives' actions. High energy people attack life with unstoppable enthusiasm. Nontraditional healers use energy pathways in our bodies to improve well-being. People from distinct religious traditions report drawing strength and guidance from the energy of a higher spirit. Students in this class will study the concept of energy from a wide range of perspectives informed by the disciplines of physics, psychology, anthropology and mathematics. As we read Prisoner of Tehran, we will explore the theme of forgiveness as a type of social energy. Can individuals and political entities realistically establish social harmony through forgiveness? In their capstone project, students will be asked to use both science and humanistic interpretations as they answer the question, "How does attention to energy enable people to make a difference?"

PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Madyun, Naim Hossein
Description: Energy...Illuminated! Energy makes things happen. In a scientific sense, converting fuel into energy enables our work, our leisure activities, and our use of everyday manufactured objects. Failing resources and rising pollution, however, require societies to consider using energy in more sustainable ways. In a humanistic sense, energy defines our lives' actions. High energy people attack life with unstoppable enthusiasm. Nontraditional healers use energy pathways in our bodies to improve well-being. People from distinct religious traditions report drawing strength and guidance from the energy of a higher spirit. Students in this class will study the concept of energy from a wide range of perspectives informed by the disciplines of physics, psychology, anthropology and mathematics. As we read Prisoner of Tehran, we will explore the theme of forgiveness as a type of social energy. Can individuals and political entities realistically establish social harmony through forgiveness? In their capstone project, students will be asked to use both science and humanistic interpretations as they answer the question, "How does attention to energy enable people to make a difference?"
PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Stebleton, Michael J  
Description: Sustainability is defined as meeting our needs today without compromising future generations' ability to meet their needs. In what ways has the human population reached koyaanisqatsi (life out of balance) and what places of our living are we still balancing on a thin green line? Is Gross National Product a better measure of human well-being or is Gross National Happiness? Can both co-exist? Through the interdisciplinary kaleidoscope of art and literature, environmental science, and oral persuasion, we will explore the meanings of these questions, search for answers, and let the world know what we find out.

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Staats, Susan K  
Description: Energy... Illuminated! Energy makes things happen. In a scientific sense, converting fuel into energy enables our work, our leisure activities, and our use of everyday manufactured objects. Failing resources and rising pollution, however, require societies to consider using energy in more sustainable ways. In a humanistic sense, energy defines our lives' actions. High energy people attack life with unstoppable enthusiasm. Nontraditional healers use energy pathways in our bodies to improve well-being. People from distinct religious traditions report drawing strength and guidance from the energy of a higher spirit. Students in this class will study the concept of energy from a wide range of perspectives informed by the disciplines of physics, psychology, anthropology and mathematics. As we read Prisoner of Tehran, we will explore the theme of forgiveness as a type of social energy. Can individuals and political entities realistically establish social harmony through forgiveness? In their capstone project, students will be asked to use both science and humanistic interpretations as they answer the question, "How does attention to energy enable people to make a difference?"

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Cory, Kris  
Description: All PSTL 1525W classes share the following common features: small classes taught by one instructor that meet twice a week and large Friday team-taught classes, a guiding question How can one person make a difference?, a common book, and a core iPad project. While each section of the course explores the common question through different means, all FYI students will read the book The Other Wes Moore and attend two common book events: a panel discussion on the pathways for youth (Friday, October 26 at 9:45 in the McNamara Alumni Center) and a public talk with the author Wes Moore (Tuesday, October 30 at 7pm at the Ted Mann Concert Hall). Students will work collaboratively on an assignment using the iPad to demonstrate learning and development outcomes. You will volunteer in at a local community organization that supports youth for 20 hours during this semester. This service learning is central to this course. We chose to put this service requirement at the center of the course for a number of reasons: to help connect University students to local communities, to relate the academic content of the course to the ?real world?, and to provide a concrete experience to help us answer the question How Can One Person Make a Difference? in a deep and meaningful way. As you engage in community service over the semester, you will also read The Other Wes Moore and study how a variety of scholars from different fields have grappled with questions of inequality, adversity and resilience in different realms of life in America: in schools, in the legal system, in families, neighborhoods and housing, and in employment. What are the challenges that young people from disadvantaged backgrounds face growing up in the United States -- and in the Twin Cities -- today? How should we respond? Obviously, in our class we hope you learn new ?content??that is, we hope you learn new things about the relationship of individuals and communities to major social institutions in the United States, how institutions support or fail to support individual and community growth and
PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Peter, Gary E  
Description: It’s clear that food plays an integral part in our daily lives, but how much do you know about that burger you just ate? Will a healthy diet help you live longer? Is fast food really that bad for you? How does food bring people together? How is food production and safety regulated by the government? In this course, team taught by a biologist, a social scientist, and a lawyer, we’ll examine food through a variety of perspectives - scientific, sociological/psychological, literary, legal - to come to a better understanding of its impact on our world. Using food-related texts from a variety of disciplines as well as writing, discussion, oral presentations, and other mediums, we’ll consider the following question: How can you, either individually or working with others, make a difference by educating yourself and others about where food comes from and how to make informed choices about what you eat? At the end of the semester, students will collaborate in small groups to present a final Capstone Project on a food-related subject to the larger College of Education and Human Development academic community.

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Jehangir PhD, Rashne Rustom  
Description: Critical moments are those turning points where something changes, and that change affects the direction of a person’s life, community, nation or even world. This course explores the common question How can one person make a difference by looking at how people tell their stories, how context can affect a story’s meaning, and all the many choices people make when they face critical moments. We will explore critical moments in our own narratives and in the lives of persons and characters in three historic events: the struggle for social justice and dignity in segregated Louisiana during the 1940’s, in New Orleans in 2005 when Hurricane Katrina hit Louisiana, and in Rwanda in 1993 when genocide occurred. This exploration will examine what forces create these personal, historic, social, political and artistic turning points in the lives of individuals, communities, countries and the world. Using contemporary and historical materials from the social sciences, humanities and theatre arts, we will explore the complexity of critical moments. Our primary texts will include the Paul Rusesabagina’s autobiography; An Ordinary Man? on which the film, Hotel Rwanda is based, the Ernest Gaines memoir and play; A Lesson Before Dying, and the Spike Lee documentary film; When The Levees Broke.

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Stahl, Jason Michael  
Description: “Are We Free?”: Freedom, Democracy and Incarceration in the United States In this section we explore the themes of freedom and imprisonment in history and literature. Specifically, we ask: How does the criminal justice system shape the racialized landscape of the United States? To what extent is the U.S. really ?the land of the free”? To what extent can ?liberation? be achieved in the Untied States, and how might this liberation be possible? These are just some of the questions we will examine in our FYI course as we explore in depth the ways that the criminal justice system intersects with notions of freedom and liberation in America. To do so, we will be relying primarily on two key texts, from two different historical periods, with distinctly different takes on the questions of the course. The first text is the CEHD Common Book The Other Wes Moore and the second text is Angela Davis’s Autobiography. In order to ?situate? the key concepts we will be exploring in these two texts, we will also read scholarly (i.e. academic) writings from a range of interdisciplinary perspectives which will draw off of the fields of history, sociology, and literature.

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Buturian, Linda J  
Description: Sustainability is defined as meeting our needs today without compromising future generations’ ability to meet their needs. In what ways has the human population reached koyaanisqatsi (life out of balance) and what places of our living are we still balancing on a thin green line? Is Gross National Product a better measure of human well-being or is Gross National Happiness? Can both co-exist? Through the interdisciplinary kaleidoscope of art and literature, environmental science, and oral persuasion, we will explore the
meanings of these questions, search for answers, and let the world know what we find out.

PsTL 1571 Computer Literacy and Problem Solving
4 credit(s); credit cannot be granted if credit has already been received for: 1573, or 1574
Credit will not be granted if credit has been received for: RM 1203;
Instructor: Robertson, Douglas Frederick
Description: Students learn concepts and develop competencies in computer technologies most often used in social sciences and in business to help solve problems. Topics include using advanced word processing techniques to create complex written documents such as reports (including character and paragraph style sheets, mailmerge, formatting, tables, graphics, cross-references, headers, footnotes, and indexes), using an electronic spreadsheet to analyze data (including formulas, IF/THEN/ELSE, LOOKUP, different types of graphs, formatting), using a database management program to store, organize, and query data (including creating customized databases, modifying database structure, data verification and formatting, creating forms and reports, exporting/importing data, data extraction), and using presentation software to communicate ideas and findings in a multimedia format (including text, clipart, photos, tables, animations, video, and audio) to larger groups. Integration of the four applications is introduced. This is a computer-mediated course and there are no lectures. The instructor helps students individually during class as they work on course projects. Course uses Microsoft Office 2010 for Windows.
Style: 90% Laboratory, 10% Web Based. Students work on computers, get help from instructor.
Grading: 50% mid exam, 35% final exam, 15% special projects.
Exam Format: Exams done on the computers in the classroom. Students modify documents as instructed.

PsTL 1942 Freshman Seminar: Technology and Society: Science and Politics of Genetics and Reproduction
3 credit(s); Meets CLE req of Technology and Society
Instructor: Jensen, Murray Stowe
Description: Student may contact the instructor or department for information.

PsTL 1993 Directed Study
1-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Kroll, Patrick A
Description: Student-initiated project in consultation with faculty monitor. Student determines topic, sets goals, designs a course of study, and finds an appropriate faculty member to work with collaboratively.

PsTL 1996 Internship
1-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Hsu, Leon
Description: Student may contact the instructor or department for information.

PsTL 5105 Increasing Access and Success in Undergraduate Classrooms
A-F only, 3 credit(s);
Instructor: Durancyzk, Irene Mary
Description: This course (delivered completely online) provides postsecondary educators with a comprehensive overview of best practices for effectively promoting access and success for all within a multicultural teaching and learning setting. Students will apply the theory and knowledge gained from this course to a review of a postsecondary institution of their choice. Students will identify issues limiting access and success and identify practices for increased access and success for all. The final product will be the design of an "intervention" suitable for the postsecondary institution to increase the likelihood of access and success all.
Style: 20% Field Trips, 80% Web Based. Students will be expected to visit a postsecondary education site at least 2-3 times during the semester. It can be the students worksite if it is postsecondary related.
Grading: 40% reports/papers, 20% written homework, 20% reflection paper, 20% class participation.

PsTL 5106 Multicultural Teaching and Learning in Diverse College Contexts
A-F only, 3 credit(s);
Instructor: Miksch, Karen L
Description: This graduate course provides an overview of the issues, principles, and practices associated with effective college teaching in diverse postsecondary contexts. The focus of the course is to explore how we can embed social justice goals and multicultural perspectives in all aspects of our daily work. To that end, we will be reading Pedagogy of the Oppressed as well as empirical and theoretical works on Critical Multicultural Education, Critical Race Theory, and Social Justice Education. When we meet during our weekly seminar we will be modeling applications of the reading to our own professional interests, whether those interests include teaching at colleges and universities, student development programs and services, or other aspects of postsecondary education. Students will have the opportunity to conduct classroom observations, develop and 'perform' lesson plans, as well as lead seminar discussions. The interaction of theory and practice (praxis) is an important theme of the course.
PsTL 5196 Supervised Practicum in Multicultural Postsecondary Teaching and Learning  
S-N only, 3 credit(s);  
Instructor: Higbee, Jeanne Louise  
Description: Student may contact the instructor or department for information.

PsTL 5212 Multicultural Theories of College Student Development Applied to Teaching and Learning  
A-F only, 3 credit(s);  
Instructor: Poch, Robert Karl  
Description: Student may contact the instructor or department for information.

PsTL 8296 Supervised Internship in Postsecondary Teaching and Learning  
S-N only, 3-6 credit(s), max credits 6;  
Instructor: Higbee, Jeanne Louise  
Description: Student may contact the instructor or department for information.

PsTL 8315 Plan B Capstone Seminar  
S-N only, 3 credit(s);  
Instructor: Lee, Amy M  
Description: Student may contact the instructor or department for information.

Preventive Science Minor  
Institute of Child Development

Prev 8005 Prevention Science Capstone Course  
OPT No Aud, 1 credit(s);  
Instructor: Gewirtz, Abigail  
Description: Student may contact the instructor or department for information.

Product Design  
101 Rapson Hall

PDes 3701 Creativity, Idea Generation, and Innovation  
A-F only, 2 credit(s);  
Instructor: Kudrowitz, Barry  
Description: Half semester course (the first 7 weeks). This is an introduction to a variety of creativity and idea generation tools with an emphasis on innovative product concept development. Students apply different toolsets to an ongoing project. Starting with a general theme, students explore needs, practice using a variety of idea generation tools, and learn methods of evaluating and selecting concepts. The class also covers topics of ethnography, benchmarking, and intellectual property. Each week the class visits a different local industry to see how they innovate.  
Style: 40% Lecture, 10% Small Group Activities, 50% Field Trips.  
Grading: 70% special projects, 10% journal, 10% class participation, 10% other evaluation.

PDes 3702 Concept Sketching and Rendering  
A-F only, 2 credit(s);  
Instructor: Kudrowitz, Barry  
Description: This class is the second 7 weeks of the semester. It is an introduction to freehand sketching for communication of conceptual design. This class is both for students who have difficulty visualizing their ideas and for students who want to get better at freehand sketching. Although the assignments will be themed with products and objects, the drawing skills can be applied to a variety of subjects. Emphasis is placed on 2-point perspective. Each week during lecture, students learn a different toolset and apply it to weekly drawing assignments.  
Style: 10% Discussion, 20% Demonstration, 70% Studio.  
Grading: 80% written homework, 20% in-class presentation.

PDes 3703 Product Form and Model Making  
A-F only, 4 credit(s);  
Instructor: Dretzka, Lizabeth W  
Description: Student may contact the instructor or department for information.
PDes 5701 Creativity, Idea Generation, and Innovation  
A-F only, 2 credit(s);  
Instructor: Kudrowitz, Barry  
Description: Half semester course (the first 7 weeks). This is an introduction to a variety of creativity and idea generation tools with an emphasis on innovative product concept development. Students apply different toolsets to an ongoing project. Starting with a general theme, students explore needs, practice using a variety of idea generation tools, and learn methods of evaluating and selecting concepts. The class also covers topics of ethnography, benchmarking, and intellectual property. Each week the class visits a different local industry to see how they innovate.  
Style: 40% Lecture, 10% Small Group Activities, 50% Field Trips.  
Grading: 70% special projects, 10% journal, 10% class participation, 10% other evaluation.

PDes 5702 Concept Sketching and Rendering  
A-F only, 2 credit(s);  
Instructor: Kudrowitz, Barry  
Description: This class is the second 7 weeks of the semester. It is an introduction to freehand sketching for communication of conceptual design. This class is both for students who have difficulty visualizing their ideas and for students who want to get better at freehand sketching. Although the assignments will be themed with products and objects, the drawing skills can be applied to a variety of subjects. Emphasis is placed on 2-point perspective. Each week during lecture, students learn a different toolset and apply it to weekly drawing assignments.  
Style: 10% Discussion, 20% Demonstration, 70% Studio.  
Grading: 80% written homework, 20% in-class presentation.

PDes 5703 Product Form and Model Making  
A-F only, 4 credit(s);  
Instructor: Dretzka, Lizabeth W  
Description: Student may contact the instructor or department for information.

Prosthodontics  9-450 MoosT

Pros 7110 Classic Prosthodontic Literature Review  
A-F only, 2 credit(s);  
Instructor: Holtan, James R  
Description: Student may contact the instructor or department for information.

Pros 7200 Advanced Clinical Prosthodontics I  
A-F only, 5 credit(s);  
Instructor: Conrad, Heather Joan  
Description: Student may contact the instructor or department for information.

Pros 7220 Prosthetically-Driven Implant Surgery and Treatment Planning  
A-F only, 1 credit(s);  
Instructor: Conrad, Heather Joan  
Description: Student may contact the instructor or department for information.

Psychology  N-218 Elliott Hall

Psy 1001 Introduction to Psychology  
4 credit(s); Credit will not be granted if credit has been received for: PSTL 1281; Meets CLE req of Social Sciences  
Instructor: Brothen, Thomas  
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policy, fee, and financial aid restrictions. Psy 1001 (online) utilizes a computer-assisted version of the Personalized System of Instruction (PSI) model. Key principles of PSI are specified learning objectives and study aids, small units (for us, these units are the chapters in your textbook), frequent testing with feedback to students, and mastery learning. The materials I've created for this course do three things. First, by focusing your attention on the main points, they make sure you don't miss important information. Second, because feedback is essential to learning, the computer exercises give you feedback when it will do you the most good—right after you finish an exercise—so that you can use that feedback to improve your knowledge. Much of what you do can simply be called practice, but it is guided practice. This will take longer than just...
reading but the old saying is as true about psychology as anything else "practice makes perfect."

**Style:** Online

**Grading:** 40% final exam, 60% written homework.

**Exam Format:** Online exam

**Psy 1001 Introduction to Psychology**

- **4 credit(s); Credit will not be granted if credit has been received for: PSTL 1281; Meets CLE req of Social Sciences**
- **Instructor:** Brothen, Thomas
- **Description:** Psy 1001 is a 4-credit introduction to the scientific study of human behavior and a prerequisite for all other Psychology courses. The course explores how something as complex as human behavior can be studied scientifically. Students will be introduced to biological, social and environmental factors that influence human behavior; predictable ways in which humans behave, reason, remember and feel; some important ways in which people differ, and how psychologists 'know' what we know. Each week, students attend (either in person or online) three lectures given by University of Minnesota Faculty, teaching in their area of expertise. In addition, each week they participate in a discussion section led by a graduate student in Psychology during which they "do" psychology in active learning activities. As part of their discussion sections, students complete writing activities to apply what they are learning in psychology to their everyday lives. --Students in sections 002-019 attend live lectures and have one-hour discussion sections of 36 students. --Students in sections 021-30 view lectures on the internet at their convenience and have 75-minute discussion sections of 36 students. The first hour is the same activity as that done by sections 002-019. The extra 15-minutes provides time to review concepts and get questions answered. --Exams are completed in a proctored computer lab in Elliott Hall.

**Style:** 75% Lecture, 25% Discussion.

**Grading:** 30% mid exam, 25% final exam, 20% quizzes, 15% written homework, 5% class participation, 5% other evaluation. Students can earn up to 5% extra credit by participating in research studies done by Department of Psychology researchers.

**Exam Format:** Multiple choice items administered in a University computer lab

**Psy 1001H Honors Introduction to Psychology**

- **A-F only, 4 credit(s); Credit will not be granted if credit has been received for: PSTL 1281; Meets CLE req of Social Sciences**
- **Instructor:** Luciana, Monica Marie
- **Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This course is designed to closely parallel the introductory psychology class offered to undergraduates at the University of Minnesota. It is a prerequisite for all other psychology courses. To the extent possible, the presentation of topics, format of written assignments, and exams conform to those used in the day school class. This study guide is organized into thirteen Lessons, with accompanying reading and written assignments. It is designed so that it can be completed within a single term.

**Style:** This is a printed correspondence section.

**Grading:** Written assignments = 50 pts Midcourse exam = 75 pts Final exam = 75 ps TOTAL = 200 * * Extra credit course paper = up to 15 pts

**Exam Format:** Supervised, in-person exams

**Psy 1511 Psychology**

- **A-F only, 3 credit(s); Meets CLE req of Social Sciences**
- **Instructor:** Winchip, James E
- **Description:** Student may contact the instructor or department for information.

**Psy 1902 Freshman Seminar: Asian American Experience**

- **3 credit(s); Meets CLE req of Diversity and Soc Justice US**
- **Instructor:** Lee, Richard M
- **Description:** Student may contact the instructor or department for information.

**Psy 1905 Freshman Seminar: What is the Human Mind**

- **A-F only, 3 credit(s), max credits 6;**
- **Instructor:** Marsolek, Chad James
- **Description:** You are reading the description of a seminar. That is, some part of you is capable of taking a series of shapes as visual
input, abstracting intended meaning from them, organizing the information, and evaluating it (e.g., "fascinating seminar!"). Your mind accomplishes this task, not your lungs or heart. What is this "mind" that is capable of such complex internal information processing? Is it just a flurry of activated brain cells, or something non-physical? One of the most intriguing aspects of the universe is that you can think, that minds operate as entities apparently crucially tied to physical brains but are also importantly different. In this seminar, we will examine conceptions of the human mind from psychological, philosophical, and neuroscientific perspectives. Can science and critical analysis offer a concrete and compelling specification of the human mind?

**Psy 1905 Freshman Seminar: Psychology of Eating**
A-F only, 3 credit(s), max credits 6;  
**Instructor:** Mann, Traci Lynn  
**Description:** This seminar covers the continuum of human eating behavior, from hunger, starvation, and restraint, to binge eating and obesity. We will also discuss the media's influence on body image. I hope that during this seminar we can call into question several myths about eating and obesity that you may believe. We will read about the famous starvation study conducted on this very campus over 60 years ago, as well as the causes and consequences of obesity. We will learn about the effectiveness of diets (or lack thereof!), and about the little things that may be influencing our eating without our realizing it. We will talk about solutions to these problems, and about what healthy eating really is.

**Psy 1905 Freshman Seminar: Psychology of Suicide**
A-F only, 3 credit(s), max credits 6;  
**Instructor:** Gabrielsen, Susanne B  
**Description:** A Google Search for "suicide" leads to more than 250 million results (compared with 33 million for anorexia and 65 million for depression). Why are people so fascinated with suicide? Why don't we talk about it more? Does talking about suicide make it more likely that people kill themselves? Why do people want to kill themselves at all? This course will tackle these questions and more by offering a broad overview of suicide from a psychological perspective. We will talk about the fascination, the taboo, the myths, the seeming senselessness, and what life is like for people who don't want to live anymore.  
**Style:** 50% Lecture, 10% Film/Video, 20% Discussion, 20% Small Group Activities.  
**Grading:** 25% reports/papers, 25% quizzes, 25% in-class presentation, 25% class participation.

**Psy 1905 Freshman Seminar: The Cultural Psychology of Storytelling**
A-F only, 3 credit(s), max credits 6;  
**Instructor:** Syed, Moin  
**Description:** Student may contact the instructor or department for information.

**Psy 3001W Introduction to Research Methods**
4 credit(s);[1001, [2801 or 3801 or equiv]] or dept consent  
Credit will not be granted if credit has been received for: PSY 3005V;Meets CLE req of Writing Intensive  
**Instructor:** Stellmack, Mark A  
**Description:** PSY 3001W is an introduction to the basic concepts and procedures used to conduct and evaluate research in Psychology. Emphasis is placed on understanding traditional research methods, applying sound experimental techniques in order to produce interpretable results, and evaluating scientific claims. PSY 3001W is a writing intensive (WI) course. As such, students will complete a number of writing assignments, culminating in an APA style research report. This course meets the writing intensive requirement stating that at least 33% of the student's final grade must be based upon student writing. Prerequisites: PSY 1001 (Intro Psychology), PSY 3801 (Intro to Psychological Measurement and Data Analysis), and at least sophomore standing.  
**Style:** 50% Lecture, 50% Laboratory.  
**Grading:** 15% mid exam, 25% final exam, 40% reports/papers, 10% written homework, 10% laboratory evaluation.

**Psy 3011 Introduction to Learning and Behavior**
3 credit(s);  
**Instructor:** Peterson, Gail Burton  
**Description:** This course introduces you to the fundamental phenomena and principles of learning and behavior analysis by surveying the major theoretical and empirical approaches of the twentieth century. The material in this course will give you an appreciation of the current state of the field. While the course emphasizes basic academic and scientific issues, some of the practical applications of the theories and principles will also be examined. The Fall semester CLA section 001 includes both classroom and online components. There is also a fully online section offered every term through Online and Distance Learning (ODL), College of Continuing Education.

**Psy 3031 Introduction to Sensation and Perception**
3 credit(s);  
**Instructor:** Engel, Stephen A  
**Description:** This hybrid course with on-line lectures and in person demo/lab sessions covers basic information about human
sensation and perception. Students will learn 1) how the human body turns different physical stimuli into neural impulses (sensation), and 2) how the brain receives and interprets these impulses (perception). Required text: Goldstein, E. B. (2010). Sensation and Perception, 8th edition.

**Style:** 10% Lecture, 50% Small Group Activities, 40% Demonstration.

**Psy 3051 Introduction to Cognitive Psychology**

3 credit(s);  
**Instructor:** Jiang,Yuhong Vanessa  
**Description:** Welcome! Cognitive psychologists explore the nature of cognitive processes such as attention, memory, concept, reasoning, perception, and language processing. Our goal is to understand how the mind works, and how the brain works to produce such a mind. This course will introduce you to some of the major tools, assumptions, and theories from a cognitive and cognitive-neuroscience perspective, and expose you to some of the more important results obtained thus far. Student evaluation from past years has been overwhelmingly positive.

**Style:** 85% Lecture, 5% Film/Video, 10% Laboratory.

**Grading:** 28% mid exam, 40% final exam, 12% reports/papers, 20% quizzes.

**Psy 3061 Introduction to Biological Psychology**

3 credit(s); 1001 or Biol 1009  
**Instructor:** STAFF  
**Description:** Instructor: Jonathan Gewirtz. The course begins with brief overviews of the structure of the central nervous system, basic principles of nervous conduction and synaptic transmission, neurotransmitter systems, and basic techniques used in biological psychology research. We will then review current knowledge on the biological substrates of a range of behaviors and mental processes, including perception, memory, emotion, and sleep. The course will also examine the biological basis of a variety of neuropsychological disorders and forms of mental illness, including addiction, depression, and anxiety. By the end, you should be comfortable with the basic details of brain function and have gained a general understanding of the biology of behavior, mental states, and mental illness. You should also have begun to develop the skills to understand techniques and evaluate results of neurobiological and behavioral experiments.

**Style:** 80% Lecture, 10% Discussion, 10% Small Group Activities.

**Grading:** 75% mid exam, 25% final exam. 3 mid term exams

**Psy 3061 Introduction to Biological Psychology**

3 credit(s); 1001 or Biol 1009  
**Instructor:** Gewirtz,Jonathan C  
**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policy, fee, and financial aid restrictions. Biological psychology is the study of behavior through the analysis of the nervous system and the study of the nervous system through analysis of behavior. The philosophical relationship between the "mind" and the brain has been debated for centuries. Discussions involve some of the most important concepts about human existence, such as "free will" and the existence of the soul. Here is the first (but certainly not the last) place that our own rather strongly held perspective will spill over into this study guide. The modern biological psychologist has found that our power to understand and explain behavior is greatest if we act under the hypothesis that the brain controls behavior. If we are to understand behavior, we must go to its source. Thus, to understand behavior, you must understand the brain. The pursuit of such understanding is a challenge, but it is an enormously tantalizing pursuit with great rewards.

**Style:** Online  
**Grading:** 40% mid exam, 30% final exam, 30% written homework.  
**Exam Format:** Online exams

**Psy 3101 Introduction to Personality**

3 credit(s); 1001  
**Instructor:** DeYoung,Colin G  
**Description:** This course provides a broad overview of theory and research in the field of personality psychology. Personality psychology addresses some of the most central and interesting questions in psychology: Why do people think, feel, and act in the ways they do? What makes people different from each other? What are the essential components of an individual's personality? This course discusses answers to these questions as they have been formulated from the beginnings of psychology, over a century ago, up to the present time, drawing on up-to-date research to suggest which theories are likely to be empirically valid. Students should get a sense of the various approaches to personality psychology as different perspectives integrated into a larger story about the extent of our understanding of the structure, dynamics, and sources of personality.

**Psy 3135 Introduction to Individual Differences**

3 credit(s); [1001, [2801/3801 or equiv]] or instr consent  
Credit will not be granted if credit has been received for: PSY 5135;
Instructor: Stanek, Kevin  
Description: Psy 3135 is a 3 credit introduction to the scientific study of what makes individuals unique psychologically. The course explores the genetic and environmental roots of these differences through the lens of evolutionary psychology theory. Students will be introduced to numerous individual differences domains such as sex, personality, intelligence, and attitudes/values. The course also examines how psychologists study these traits and the implications they have for life outcomes (e.g., salary, divorce, longevity, etc). Each week, students attend lectures, complete readings from the textbook and supplementary sources, and take online quizzes to assess their progress.  
Style: 75% Lecture, 5% Film/Video, 5% Discussion, 5% Small Group Activities, 5% Demonstration, 5% Guest Speakers.  
Grading: 10% mid exam, 15% final exam, 50% quizzes, 10% additional semester exams, 5% other evaluation. Attendance and participation are highly encouraged and do indirectly affect course grade.  
Exam Format: Multiple choice

Psy 3201 Introduction to Social Psychology  
3 credit(s);  
Instructor: Dwyer, Patrick  
Description: Student may contact the instructor or department for information.

Psy 3206 Introduction to Health Psychology  
3 credit(s);  
Instructor: Wlaschin, Jhon Thomas  
Description: Student may contact the instructor or department for information.

Psy 3301 Introduction to Cultural Psychology  
A-F only, 3 credit(s);  
Instructor: Hu, Alison Wen-Hsin  
Description: Student may contact the instructor or department for information.

Psy 3511 Introduction to Counseling Psychology  
3 credit(s);  
Instructor: Howard, Kelli G  
Description: Student may contact the instructor or department for information.

Psy 3511 Introduction to Counseling Psychology  
3 credit(s);  
Instructor: Meredith, Liza Niederehe  
Description: History, theories, and research related to counseling psychology. Development/application of counseling theories to diverse populations. Psychological research on counseling process. Psychological mechanisms that promote change in people's lives.

Psy 3511 Human Development across the Lifespan  
A-F only, 3 credit(s);  
Instructor: Winchip, James E  
Description: Student may contact the instructor or department for information.

Psy 3604 Introduction to Abnormal Psychology  
3 credit(s);  
Instructor: Weiszhaar, Orville L  
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The field of abnormal psychology (also known as psychopathology) is diverse, as you can see by leafing through the textbook for this course. It includes such topics as bipolar disorder, post-traumatic stress syndrome, AIDS dementia complex, pedophilia, stuttering, and pathological gambling. Each of these areas, as well as hundreds of others, has its own specialists and research. This course will provide you with a complete, although certainly not exhaustive, overview of each area.  
Style: Online  
Grading: --8 written assignments: 62.5% --2 online exams: 37.5%  
Exam Format: Online

Psy 3604 Introduction to Abnormal Psychology  
3 credit(s);  
Instructor: Weiszhaar, Orville L  
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The field of abnormal psychology (also known as psychopathology) is diverse, as you can see by leafing through the textbook for this course. It includes such topics as bipolar disorder, post-traumatic stress syndrome, AIDS dementia complex, pedophilia, stuttering, and pathological gambling. Each of these areas, as well as hundreds of others, has its own specialists and research. This course will provide you with a complete, although certainly not exhaustive, overview of each area.  
Style: Online  
Grading: --8 written assignments: 62.5% --2 online exams: 37.5%  
Exam Format: Online
Psy 3604 Introduction to Abnormal Psychology
3 credit(s);[1001 or equiv]; intended for students who plan to major in psychology

Instructor: Kaczkurkin,Toni
Description: Course Description This course will introduce students to a multidimensional approach to conceptualizing various types of psychological disorders. During this course, students will be responsible for learning basic descriptive psychopathology as described in the DSM-IV-TR as well as descriptive information including prevalence rates, ages of onset, and cultural differences. An introductory overview to some of the causes and treatments of psychopathology will be provided to the extent that it helps students understand the various mental disorders. A prerequisite for this course is PSY 1001.

Psy 3617 Introduction to Clinical Psychology
3 credit(s);
Instructor: Klimes-Dougan,Bonnie
Description: Course Description This course is meant to familiarize students with the field of clinical psychology, primarily as it exists in the U.S. The course first briefly discusses the history of clinical psychology, the most widely accepted scientist practitioner approach to clinical psychology and the current status of the field of clinical psychology. The course covers clinical assessment, psychological interventions, and psychopathology and treatment research. This course may help students, considering a career in clinical psychology, decide whether this field appeals to them. Please make sure you have taken the prerequisite before signing up for this course.

Psy 3666 Human Sexuality
3 credit(s);
Instructor: Althaus,Linde
Description: Student may contact the instructor or department for information.

Psy 3711 Introduction to Industrial and Organizational Psychology
3 credit(s);
Instructor: D'Mello,Susan D
Description: Student may contact the instructor or department for information.

Psy 3801 Introduction to Psychological Measurement and Data Analysis
4 credit(s);High school algebra, [PSY 1001 or equiv]; intended for students who plan to major in psychology
Credit will not be granted if credit has been received for: PSY 3801H;Meets CLE req of Mathematical Thinking
Instructor: Stellmack,Mark A
Description: PSY 3801 is an introduction to measurement and analysis of psychological data. The course covers topics in descriptive and inferential statistics that are typical of most introductory statistics courses: Frequency distributions, graphical data presentation, measures of central tendency and variability, probability, z-scores, t-tests, one-way ANOVA, two-way ANOVA, effect size, confidence intervals, non-parametric tests, correlation, and regression. Emphasis is placed on understanding the analysis techniques; thus computations will be done by hand and on calculators. No computer software will be used.
Style: 75% Lecture, 15% Discussion, 10% Small Group Activities.
Grading: 50% mid exam, 30% final exam, 10% quizzes, 10% written homework.

Psy 3801H Honors Introduction to Psychological Measurement and Data Analysis
A-F only, 4 credit(s);[1001 or equiv], high school algebra, honors; intended for students who plan to major in psychology
credit will not be granted if credit already received for: Psy 2801 or Psy 2801H [1001 or equiv], high school algebra, honors;
intended for students who plan to major in psychology
Credit will not be granted if credit has been received for: PSY 3801;Meets CLE req of Mathematical Thinking
Instructor: Nichol,Penny E
Description: Student may contact the instructor or department for information.

Psy 3902W Major Project in Psychology
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
**Instructor:** Niccoli-Waller, Caprice  
**Description:** In this course, you will have the opportunity to review and reflect on some of the principles of psychological research and use this knowledge to explore a topic of your choice. You will complete a writing project, a psychological literature review, that is designed to let you focus on a topic of interest and to showcase your skills to digest, organize, synthesize, and communicate the psychological literature. You will attend 2 lectures at the start of the term and then work in weekly labs under graduate student assistance. During the first third of the course, you will complete weekly assignments in preparation for your writing project. You will also work in small groups and participate in a peer paper review. At the end of the term, you will present your work in a class poster session. For additional course details please refer to the following site: http://www.psych.umn.edu/undergrad/majorproject.htm  
**Style:** 20% Lecture, 70% Laboratory, 10% Student Presentation. Those selecting research lab or community projects will spend time outside of class engaged in these activities.  
**Grading:** 50% reports/papers, 25% quizzes, 25% written homework.

**Psy 4036 Perceptual Issues in Visual Impairment**  
3 credit(s);  
**Instructor:** Bochsler, Tiana M  
**Description:** This course applies contemporary research findings to an improved understanding of the real-world abilities of visually impaired people. Each class session is divided between lecture and a hands-on lab exercise with state-of-the-art adaptive technology. Topics include: Prevalence of low-vision and blindness, Three dimensions of vision loss (acuity, contrast sensitivity, and visual field), Auditory and tactile perception, Brain adaptation to vision loss, Reading and low vision, Braille reading, Synthetic speech, Adaptive technology for reading, Space perception, Navigational technology (ranging from canes to GPS), Driving with low vision, Object recognition and face recognition, Adaptive technology for computer access, Recreational activities. This course is designed for a variety of audiences including Psychology majors, people with vision impairment, students with career interests in rehabilitation or eye care (special education, occupational therapy, physical therapy, pre-optometry, pre-med, or nursing), and professionals with related interests.

**Psy 4501 Psychology of Women and Gender**  
3 credit(s);  
**Instructor:** Kling, Kristen C  
**Description:** Student may contact the instructor or department for information.

**Psy 5012 Learning and Cognition in Animals**  
4 credit(s);  
**Instructor:** Overmier, J. Bruce  
**Description:** Psy 5012 Learning and Cognition in Animals (Sec 001); 4 cr; prereq 3011 or 4011 or honors or grad student or instr consent; meets DELM req of classroom Instructor: Overmier, J. Bruce Description: Are you "smarter" than a rat? How can you know? This course provides review and evaluation of historical and contemporary approaches to key questions, theories, methods, and data about different forms of learning, behavior, and elementary cognitive processes as explored in animals. Although the emphasis is on animal models, implications of the findings for insights into human learning, behavior, and cognition are considered. The goal is to enable students to think about the psychology of learning using different perspectives so as to apply the principles in adaptive ways to a variety of contexts. The course uses primarily lecture format. It is intended for advanced undergraduates and beginning graduate students in the behavioral, biological, and educational sciences. Class time: 85% lecture, 5% Closed Circuit TV, 10% Discussion Work load: 45 pages of reading per week, 3 exams Grade: 50% mid-semester exam(s), 50% final exam Exam format: multiple choice and short essay.

**Psy 5018H Mathematical Models of Human Behavior**  
A-F only, 3 credit(s);  
**Instructor:** Schrater, Paul Robert  
**Description:** Mathematical models of complex human behavior, including individual and group decision making, information processing, learning, perception, and overt action. Specific computational techniques drawn from decision theory, information theory, probability theory, machine learning, and elements of data analysis.

**Psy 5037 Psychology of Hearing**  
3 credit(s);  
**Instructor:** Viemeister, Neal F  
**Description:** Student may contact the instructor or department for information.

**Psy 5054 Psychology of Language**  
3 credit(s);
Psy 5062 Cognitive Neuropsychology  
3 credit(s);  
Instructor: He, Sheng  
Description: This course will survey the consequences of different types of brain damage on human perception and cognition. The goal is to understand the neural mechanisms of normal perceptual and cognitive functions. Major phenomena that will be covered include: Blindsight (seeing without awareness), Visual Agnosia (failure to recognize object), Prosopagnosia (impairments of facial recognition), Neglect (failure to attend to part of the world), the split brain, Spoken language deficits, reading and writing disorders, memory disorders, central planning deficits. The emphasis is on function and phenomenology, with minimal amount of brain anatomy. This course is aimed at undergraduate and beginning graduate students who are interested in psychology and neuroscience. Text: A.J. Parkin "Explorations in Cognitive Neuropsychology".  
Style: 90% Lecture, 5% Discussion.  
Grading: 30% mid exam, 50% final exam, 20% problem solving.  
Exam Format: Multiple choice and short essay

Psy 5137 Introduction to Behavioral Genetics  
3 credit(s);  
Instructor: McGue, Matt  
Description: This course focuses on the application of genetic methods to human and animal behavior. Genetic methods discussed include both traditional methodologies like twin and adoption studies as well as cytogenetic and molecular genetic methods. Behavioral applications covered include: Intelligence and mental retardation, personality, schizophrenia, affective illness, and alcoholism.  
Style: 100% Lecture.  
Grading: 30% mid exam, 40% final exam, 30% reports/papers.  
Exam Format: Essay

Psy 5204 Psychology of Interpersonal Relationships  
A-F only, 3 credit(s);  
Instructor: Kim, John Smithe  
Description: Student may contact the instructor or department for information.

Psy 5207 Personality and Social Behavior  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Conceptual/methodological strategies for scientific study of individuals and their social worlds. Applications of theory/research to issues of self, identity, and social interaction.

Psy 5207 Personality and Social Behavior  
A-F only, 3 credit(s);  
Instructor: Snyder, Mark  
Description: Conceptual/methodological strategies for scientific study of individuals and their social worlds. Applications of theory/research to issues of self, identity, and social interaction.

Psy 5707 Personnel Psychology  
4 credit(s);[3001W or equiv], 3711] or instr consent credit will not be granted if credit received for: 5701, 5703Credit will not be granted if credit has been received for: PSY 5701;  
Instructor: Kuncel, Nathan Richard  
Description: The course deals with the application of psychological research and theory to issues in personnel recruitment, selection, training and the measurement of human performance. The first half of the course is devoted to modeling, measuring and predicting individual performance in work settings. Different approaches to occupation analysis are examined for the purpose of performance assessment. Different prediction tools such as ability and personality tests, biographical information; and their validity, utility, and fairness interviews are then discussed. The second half of the course is devoted to theories, methods, and research pertaining to improving performance of individuals at work through learning and instruction. Appropriate knowledge and skill structures, the
interaction between ability level and training methods, and the influence of learner motivation are stressed. The general purposes of the course are to provide the student with a comprehensive and useful framework for how to identify staffing and training problems, design selection and training programs and evaluate results. The student should also gain considerable familiarity with what the field of personnel psychology is like as a profession. The course attempts to show how many different areas of theory and research in psychology can be brought to bear on organizational problems and issues.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 50% mid exam, 50% final exam.

**Exam Format:** Each exam includes multiple types of questions (e.g., multiple choice, matching, definition, short answer and essay).

**Psy 5707 Personnel Psychology**

4 credit(s);[3001W or equiv], 3711 or instr consent credit will not be granted if credit received for: 5701, 5703Credit will not be granted if credit has been received for: PSY 5701;

**Instructor:** Campbell, John P

**Description:** The course deals with the application of psychological research and theory to issues in personnel recruitment, selection, training and the measurement of human performance. The first half of the course is devoted to modeling, measuring and predicting individual performance in work settings. Different approaches to occupation analysis are examined for the purpose of performance assessment. Different prediction tools such as ability and personality tests, biographical information; and their validity, utility, and fairness interviews are then discussed. The second half of the course is devoted to theories, methods, and research pertaining to improving performance of individuals at work through learning and instruction. Appropriate knowledge and skill structures, the interaction between ability level and training methods, and the influence of learner motivation are stressed. The general purposes of the course are to provide the student with a comprehensive and useful framework for how to identify staffing and training problems, design selection and training programs and evaluate results. The student should also gain considerable familiarity with what the field of personnel psychology is like as a profession. The course attempts to show how many different areas of theory and research in psychology can be brought to bear on organizational problems and issues.

**Style:** 70% Lecture, 30% Discussion.

**Grading:** 50% mid exam, 50% final exam.

**Exam Format:** Each exam includes multiple types of questions (e.g., multiple choice, matching, definition, short answer and essay).

**Psy 5862 Psychological Measurement: Theory and Methods**

3 credit(s);

**Instructor:** Waller, Niels Gordon

**Description:** Psychological measurements are used in all applied areas of psychology. Tests and other measuring instruments that quantify human behavior are used by counseling and clinical psychologists, school psychologists, industrial/organizational psychologists, and any psychological researcher doing research that involves individual differences. Psychological measurement methods are also used by researchers in a wide variety of other fields including sociology, political science, education, and medical and nursing research. Psy 5862 is concerned with the process of quantification in psychology and related fields -- why do we quantify, how do we quantify, and how do we know if our measurements (or measuring instruments constructed by others) are functioning properly? The discussion includes all types of psychological measurement instruments -- tests of ability and achievement, and scales for measuring personality, interests, and preferences. The focus is not on specific measuring instruments, but on methods and procedures that are used to develop various types of instruments. Procedures for evaluating instruments in terms of their reliability, validity, and other characteristics are emphasized. A basic knowledge of statistics and introductory calculus (simple derivatives and integrals) is assumed.

**Style:** 100% Lecture.

**Grading:** 40% mid exam, 60% final exam.

**Exam Format:** Essay: short- and long-answer

**Psy 5960 Topics in Psychology: Psychology in International Perspective**

3 credit(s), max credits 8;

**Instructor:** Overmier, J. Bruce

**Description:** Title: Psychology in International Perspective Instructor: Overmier, J. Bruce Description: The course is aimed at those who plan a career in psychology. Over a career, one makes many international contacts. The course will review approaches to the study, research, and practice of psychology in various regions of the world. We shall seek out similarities and contrasts across the regions. The goal is to become aware of other world views of modern psychology. The course will be managed as a seminar with students taking turns reporting and leading discussions. Class Time: 10% lecture, 90% discussion Work Load: about 40 pages of reading per week, 15-20 pages of writing per semester. Grades: Based on Seminar presentations and contributions to discussions.

**Psy 5993 Research Laboratory in Psychology**

3 credit(s), max credits 18, 6 completions allowed;

**Instructor:** Brothen, Thomas
Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Iacono, William George
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Frazier, Patricia Ann
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Grove, William Merrill
Description: Research topics include clinical judgment and actuarial data combination, philosophy of statistics and scientific theory testing, and classification of the major psychiatric disorders (including categorical vs. dimensional models). Research on taxometrics (a robust form of multivariate mixture modeling) is also featured.
Grading: 100% reports/papers.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Simpson, Jeffrey A
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Marsolek, Chad James
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Waller, Niels Gordon
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Rothman, Alexander John
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Luciana, Monica Marie
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Thomas, Mark John
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Kuncel, Nathan Richard
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: MacDonald III, Angus
Description: Student may contact the instructor or department for information.
Description: The TRiCAM laboratory explores questions in basic cognitive and affective neuroscience, the biological bases of psychopathology, and the measurement of group differences. Methodologies include functional magnetic resonance imaging (fMRI), behavioral genetics (twin and family studies), clinical assessment and cognitive testing. Current research includes (1) understanding how executive control mechanisms, which are associated with prefrontal cortex functioning, interact with attention, affective processing, social interactions and decision-making; (2) evaluating how impairments in such mechanisms may be related to schizophrenia, psychosis and externalizing behaviors and the genes associated with these conditions; and (3) methods development for analyzing fMRI, and psychometric confounds in the measurement of group differences. Eligibility: Must be an undergraduate student at the University of Minnesota; must have at least a 3.5 GPA; and must have taken or be concurrently enrolled in the following courses as prerequisites: PSY 1001, PSY 3005W, & PSY 3604. Responsibilities & Expectations: Attend weekly laboratory meetings (including presenting research findings as indicated); attend bi-weekly journal club meetings (including leading one discussion); Complete work as in the laboratory in the amount of 3 hrs per credit per week (generally 2 mornings or afternoons per week); and write an APA-style research lab report (9-15 pp). Duties and activities include but are not limited to: running participants in research studies, data management & analysis, active participation in lab meetings and journal club. Grades will be based on: 1) laboratory attendance and fulfillment of responsibilities; 2) lab meeting attendance (with exceptions to be arranged with the instructor); 3) journal club presentation; 4) final lab report.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Olman, Cheryl Annette
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Legge, Gordon Ernest
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Borgida, Eugene
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Overmier, J. Bruce
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Ones, Deniz S
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Sackett, Paul R
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Campbell, John P
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Hansen, Jo-Ilda C
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Gonzales, Marti Hope  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Snyder, Mark  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Fletcher, Charles R  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Schrater, Paul Robert  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: He, Sheng  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Krueger, Robert  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Gewirtz, Jonathan C  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Lee, Richard M  
Description: This directed research is designed for undergraduate and graduate students interested in the role of race, ethnicity, and culture in the development and well-being of individuals and families from diverse racial and ethnic backgrounds with a particular focus on adopted individuals and families and children of immigrant parents.  
Style: 20% Discussion, 80% Laboratory. Students are expected to attend a weekly lab group meeting and reading group.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Federico, Christopher Michael  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Koutstaal, Wilma  
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Klimes-Dougan, Bonnie
Description: Students will become involved in applied research experiences that involve work with depressed adolescents.
Style: 10% Lecture, 90% Laboratory.
Grading: 15% reports/papers, 10% class participation, 75% laboratory evaluation.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Oxenham, Andrew John
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Jiang, Yuhong Vanessa
Description: This is a research laboratory class with a focus on attention and memory research. Students are expected to work 8 hours in Prof. Jiang's laboratory in chunks of 2 half days or 1 whole day. There will also be a one-hour lab meeting. During this time students will engage in active laboratory research. Because of the significant amount of supervision involved, this class has limited enrollment with the permission of the instructor. It is expected that no more than 5 students will be permitted to enroll in this class in Fall and Spring semesters combined. Grading will be given on the basis of attendance, laboratory performance, and a 5-page final paper. Students interested in the course should email Prof. Jiang (jiang166@umn.edu), attach a CV including GPA, and a statement about why you wish to enroll in this research laboratory course.
Style: 10% Discussion, 80% Laboratory, 10% Small Group Activities.
Grading: 15% reports/papers, 70% attendance, 15% laboratory evaluation.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Mann, Traci Lynn
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Engel, Stephen A
Description: Engel lab research/lab meeting

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: DeYoung, Colin G
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Schmidt, Aaron Michael
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Syed, Moin
Description: This directed research is designed for undergraduate and graduate students interested in the topics of narrative, identity, culture, and education, with particular emphasis on a developmental perspective. Students interested in any one of these four topics are encouraged to enroll, but the primary emphasis will be on narrative approaches to development (e.g., how cultural, ethnic, and racial identities are constructed and communicated through narrative). We will explore issues pertaining to narrative theory, methods, coding, and analysis; how narrative can complement other forms of inquiry; and how narrative can contribute to social justice research; among other topics. Students are expected to attend a weekly lab group meeting and reading group.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Lissek, Shmuel
Description: Student may contact the instructor or department for information.
Psy 8042 Proseminar in Cognition, Brain, and Behavior  
A-F only, 3 credit(s);  
Instructor: Koutstaal, Wilma  
Description: This seminar course will introduce students to advanced topics in cognition, brain, and behavior. The course will combine lecture, discussion, and student-led presentations of research papers on core topics of attention, memory, emotion, categorization, thinking, and language, and intersections between these areas. The course readings and discussion will seek to extend our understanding of fundamental concepts of cognition, brain, and behavior while also pointing to the "edges" of what we know, and important unanswered questions. The course is jointly taught with additional invited faculty lectures and participation in discussion.

Psy 8061 Neuropsychopharmacology  
A-F only, 3 credit(s); 5xxx coursework in biological psych or neuroscience or pharmacology or instr consent Credit will not be granted if credit has been received for: CMB 8208;  
Instructor: Molitor, Thomas William  
Description: Student may contact the instructor or department for information.

Psy 8111 Psychopathology I  
A-F only, 4 credit(s);  
Instructor: Peuschold, Dawn M  
Description: Student may contact the instructor or department for information.

Psy 8205 Principles of Social Psychology  
3 credit(s), max credits 15, 5 completions allowed;  
Instructor: Gonzales, Marti Hope  
Description: One course in a two-semester course sequence designed to provide graduate students with a systematic overview of the field of social psychology. The course will provide students with grounding in various theoretical perspectives and methodological orientations in the field and with an understanding of how these perspectives guide both intra- and inter-disciplinary research activities. Topics covered in this semester offering include but are not limited to the history of social psychology; research methods; attitude structure and function; social influence and attitude change; social cognition; and the self, personality, and social behavior.

Psy 8210 Law, Race, and Social Psychology  
A-F only, 3 credit(s);  
Instructor: Borgida, Eugene  
Description: Student may contact the instructor or department for information.

Psy 8211 Proseminar in Political Psychology I  
S-N only, 1 credit(s); Political Psychology grad minor Credit will not be granted if credit has been received for: POL 8307;  
Instructor: Lavine, Howard G  
Description: Student may contact the instructor or department for information.

Psy 8501 Counseling Psychology: History and Theories  
3 credit(s);  
Instructor: Conlon, Amy Lynne  
Description: Student may contact the instructor or department for information.

Psy 8503 Interviewing and Intervention  
3 credit(s);  
Instructor: Lee, Richard M  
Description: Student may contact the instructor or department for information.

Psy 8510 Counseling Psychology Beginning Practicum: General  
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;  
Instructor: Hansen, Jo-Ida C  
Description: Student may contact the instructor or department for information.

Psy 8514 University Counseling Practicum I  
S-N only, 4-6 credit(s), max credits 6, 1 completion allowed;  
Instructor: Beckham-Chasnoff, Sarra  
Description:
Psy 8542 Ethics in Psychology
S-N only, 3 credit(s);
Instructor: Brunnquell, Donald Joseph
Description: Philosophical systems of ethics and their implications for applied psychology (clinical, counseling, industrial & organizational). Practical ethical dilemmas that emerge in applied psychology, and solutions to them. This course is in a discussion format, with assigned readings in behavior science and medical ethics for each class session. There is a midterm examination and an assigned paper to write about an ethical dilemma (student's choice of topic, approved by the instructors.
Grading: 45% mid exam, 45% reports/papers, 5% in-class presentation, 5% class participation.

Psy 8560 Counseling Psychology Advanced Practicum I: General
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Frazier, Patricia Ann
Description: Student may contact the instructor or department for information.

Psy 8565 Counseling Psychology Advanced Practicum I: Career Counseling and Assessment Clinic
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Conlon, Amy Lynne
Description: Student may contact the instructor or department for information.

Psy 8570 Counseling Psychology Internship I
S-N only, 1-12 credit(s), max credits 36, 36 completions allowed;
Instructor: Hansen, Jo-Ida C
Description: Student may contact the instructor or department for information.

Psy 8611 Assessment I
A-F only, 5 credit(s);
Instructor: Grove, William Merrill
Description: Dr. Grove's part of this course covers clinical judgment and data combination. Heuristic and mathematically correct decision aids are featured. Topics include errors in clinical judgment and how to avoid them, base rates and Bayes theorem, and signal detection theory.
Grading: 90% final exam, 10% class participation.

Psy 8620 Clinical Psychology Practicum
S-N only, 1-6 credit(s), max credits 36, 8 completions allowed;
Instructor: MacDonald III, Angus
Description: Student may contact the instructor or department for information.

Psy 8621 Clinical Intervention I
A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ayers, James L
Description: Student may contact the instructor or department for information.

Psy 8702 Seminar in Industrial and Organizational Psychology II
A-F only, 3 credit(s);
Instructor: Campbell, John P
Description: Student may contact the instructor or department for information.

Psy 8881 Seminar: Quantitative and Psychometric Methods
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Weiss, David J
Description: Student may contact the instructor or department for information.

Psy 8935 Readings in Behavioral Genetics and Individual Differences Psychology
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Mc Gue, Matt
Description: Student may contact the instructor or department for information.
Psy 8960 Graduate Seminar in Psychology
1-4 credit(s), max credits 36, 9 completions allowed;
Instructor: Weiss, David J
Description: Student may contact the instructor or department for information.

Public Affairs

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: O'Leary, Patrick James
Description: PLEASE NOTE DIFFERENCES IN THE FOLLOWING COURSE SECTIONS of PA 1961W: SECTION 5 with Patrick O'Leary and Jules Darg is a regular CLASSROOM course and will meet twice weekly on Tuesdays and Thursdays during fall semester. SECTION 12 with Cynthia Digby and Jules Darg is entirely ONLINE. SECTION 15 with Jules Darg is a BLENDED course (half classroom and half online). The seven (7) classroom sessions will meet on Mondays from 4:00 p.m. – 6:30 p.m. on the following dates: 9/10, 9/24, 10/08, 10/22, 11/05, 11/19, and 12/03. All three sections (5, 12, and 15) of this 1xxx-level course introduce leadership through personal perspectives and frameworks where students examine their own and other classmates' views on leadership through a dynamic community of learners. Students will explore the differences between personal and positional leadership, and study characteristics of effective leadership, including leaders at the University of Minnesota and beyond. Students will also learn about leadership through the development of a social betterment project and the importance of personal development. PA 1961W also fulfills the 1xxx-level core course requirement for the Leadership Minor.
Style: 50% Lecture, 50% Web Based. This class is entirely online.

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: Darg, Jules
Description: PLEASE NOTE DIFFERENCES IN THE FOLLOWING COURSE SECTIONS of PA 1961W: SECTION 5 with Patrick O'Leary and Jules Darg is a regular CLASSROOM course and will meet twice weekly on Tuesdays and Thursdays during fall semester. SECTION 12 with Cynthia Digby and Jules Darg is entirely ONLINE. SECTION 15 with Jules Darg is a BLENDED course (half classroom and half online). The seven (7) classroom sessions will meet on Mondays from 4:00 p.m. – 6:30 p.m. on the following dates: 9/10, 9/24, 10/08, 10/22, 11/05, 11/19, and 12/03. All three sections (5, 12, and 15) of this 1xxx-level course introduce leadership through personal perspectives and frameworks where students examine their own and other classmates' views on leadership through a dynamic community of learners. Students will explore the differences between personal and positional leadership, and study characteristics of effective leadership, including leaders at the University of Minnesota and beyond. Students will also learn about leadership through the development of a social betterment project and the importance of personal development. PA 1961W also fulfills the 1xxx-level core course requirement for the Leadership Minor.
Style: 50% Lecture, 50% Web Based. This class is entirely online.

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: Marshall, Scott Ethan
Description: Student may contact the instructor or department for information.

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: Timm, Jeffrey Scott
Description: Student may contact the instructor or department for information.

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: Soria, Krista Marie
Description: Student may contact the instructor or department for information.

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: Russell, Kathrine Anna
Description: Student may contact the instructor or department for information.
PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1302; Meets CLE req of Writing Intensive
Instructor: McFadden, Colin Hamilton
Description: Student may contact the instructor or department for information.

Instructor: Novack, Lisa Marie
Description: Student may contact the instructor or department for information.

Instructor: Marcy, Ben
Description: Student may contact the instructor or department for information.

Instructor: Cisneros, Steven M
Description: Student may contact the instructor or department for information.

Instructor: Hellstrom, David P
Description: This 1000 level course introduces leadership using a personal leadership perspectives and frameworks. Students taking this course will have the opportunity to examine their own views on leadership, explore the differences between personal and positional leadership, study characteristics of leaders within the University of Minnesota and learn about the importance of personal development.

Instructor: Long, Brian Richard
Description: Student may contact the instructor or department for information.

Instructor: Harris, Margaret McKenny
Description: Student may contact the instructor or department for information.

PA 3002 Policy Analysis for Public & Nonprofit Organizations
A-F only, 3 credit(s);
Instructor: Gunyou, John
Description: This is an introductory course in policy analysis, with case studies and real-world exercises that provide future nonprofit and public sector managers with the basic concepts and practical tools in problem definition, data collection and analysis, alternatives identification and evaluation, presentation techniques and implementation strategies. The course is designed to equip future managers with the policy foundations and practical tools and analytical techniques they need to be successful in their careers. The case study method is emphasized, with exercises designed to foster an understanding of how the policy analysis process works, and to provide students with practical experience in using effective techniques and applied methodologies. Case studies include such current and real-world topics as sports stadiums, teenage driving restrictions, housing assistance, on-campus parking, light rail transit, missing children, substance abuse, lakefront and downtown development. The course culminates in a comprehensive team policy analysis exercise and presentation.
Style: 25% Lecture, 50% Discussion, 25% Small Group Activities. The course generally follows a format in which one topic is covered each week. Lecture outlines are available on Moodle to guide student readings and interactive class discussions. Complete presentations are posted following the applicable class.
Grading: 15% mid exam, 15% final exam, 35% special projects, 30% written homework, 5% class participation. Six individual case studies, two team case studies and two exams are all designed to help students apply the policy concepts and practical techniques learned in class.
Exam Format: Exams reflect the same applied material assigned in the case studies. Students are permitted to use page of notes and materials of their choosing for the exams.

PA 3003 Nonprofit and Public Financial Management
PA 3961 Leadership, You, and Your Community
A-F only, 3 credit(s); PA 1961W or CFAN 3480 or CFAN 1101 or EDPA 1301W or EDPA 1302 or OLPD 1301W or OLPD 1302
Credit will not be granted if credit has been received for: OLPD 3302;
Instructor: Nicholls, Michael Lee
Description: Student may contact the instructor or department for information.

PA 3961 Leadership, You, and Your Community
A-F only, 3 credit(s); PA 1961W or CFAN 3480 or CFAN 1101 or EDPA 1301W or EDPA 1302 or OLPD 1301W or OLPD 1302
Credit will not be granted if credit has been received for: OLPD 3302;
Instructor: Ve Lure Roholt, Christine Elizabeth
Description: This course will examine leadership and leadership capacities within the context of social change and public work. Students taking this course will have the opportunity to examine how values (their own and others) guide leadership and social change. We will focus on how change is possible around a given social issue and how local organizations/businesses/groups utilize leadership to create positive change. Learning Objectives: (a) Demonstrate resilience through taking risks, failing, questioning and then adapting your actions and thinking to the contexts you encounter in class and in your community. How do you prepare to come in right again, again and again? (b) Improve ability to research and analyze complex social issues/systems in order to create sustainable and effective actions. How do you create an adaptive solution to a challenging problem? What is the importance of and how does one explore various viewpoints, complete in-depth research and look at the system as a whole? (c) Push your personal and interpersonal boundaries to support a safe, learning community during our classroom time and a regular self-renewal practice. How do you help to create our safe community? How do you prohibit or damage the safe community? Why is it vital for leaders to find ways to renew themselves personally and professionally? What are some ways to do this? (d) Strengthen self-awareness of the interaction of your personal framework of being in the world and other's framework of being in the world. How do your sets of values, political, social and philosophical viewpoints live in the world along side that of other people's set of values, political, social and philosophical viewpoints? Why and how does this matter to our leadership (individually and collectively)? (e) Increase awareness of and practice the discipline (mental, physical, and emotional) that is required to become a responsible and accountable leader and learner in our world today. (f) Explore more deeply these concepts important to leadership. What exactly do they mean? How do you make sense of them in your practice of leadership? --Adaptive Leadership --Values --Power --Relationships --Accountability and trust

PA 3961 Leadership, You, and Your Community
A-F only, 3 credit(s); PA 1961W or CFAN 3480 or CFAN 1101 or EDPA 1301W or EDPA 1302 or OLPD 1301W or OLPD 1302
Credit will not be granted if credit has been received for: OLPD 3302;
Instructor: Asmundson, Aaron R
Description: This course will examine leadership and leadership capacities within the context of social change and public work. Students taking this course will have the opportunity to examine how values (their own and others) guide leadership and social change. We will focus on how change is possible around a given social issue and how local organizations/businesses/groups utilize leadership to create positive change. Learning Objectives: (a) Demonstrate resilience through taking risks, failing, questioning and then adapting your actions and thinking to the contexts you encounter in class and in your community. How do you prepare to come in right again, again and again? (b) Improve ability to research and analyze complex social issues/systems in order to create sustainable and effective actions. How do you create an adaptive solution to a challenging problem? What is the importance of and how does one explore various viewpoints, complete in-depth research and look at the system as a whole? (c) Push your personal and interpersonal boundaries to support a safe, learning community during our classroom time and a regular self-renewal practice. How do you help to create our safe community? How do you prohibit or damage the safe community? Why is it vital for leaders to find ways to renew
themselves personally and professionally? What are some ways to do this? (d) Strengthen self-awareness of the interaction of your personal framework of being in the world and other’s framework of being in the world. How do your set of values, political, social and philosophical viewpoints live in the world along side that of other people’s set of values, political, social and philosophical viewpoints? Why and how does this matter to our leadership (individually and collectively)? (e) Increase awareness of and practice the discipline (mental, physical, and emotional) that is required to become a responsible and accountable leader and learner in our world today. (f) Explore more deeply these concepts important to leadership. What exactly do they mean? How do you make sense of them in your practice of leadership? --Adaptive Leadership --Values --Power --Relationships --Accountability and trust

PA 3971 Leadership Minor: Field Experience
A-F only, 3 credit(s); PA 3961 or 3961W or EDPA 3302 or EDPA 3302W or OLPD 3302 Credit will not be granted if credit has been received for: OLPD 3306;  
Instructor: Ve Lure Roholt, Christine Elizabeth  
Description: Student may contact the instructor or department for information.

PA 3971 Leadership Minor: Field Experience
A-F only, 3 credit(s); PA 3961 or 3961W or EDPA 3302 or EDPA 3302W or OLPD 3302 Credit will not be granted if credit has been received for: OLPD 3306;  
Instructor: Frazzini, Ronald Michael  
Description: Student may contact the instructor or department for information.

PA 3971 Leadership Minor: Field Experience
A-F only, 3 credit(s); PA 3961 or 3961W or EDPA 3302 or EDPA 3302W or OLPD 3302 Credit will not be granted if credit has been received for: OLPD 3306;  
Instructor: Nobbe, June Elly  
Description: Student may contact the instructor or department for information.

PA 3991 Independent Study
1-3 credit(s), max credits 6;  
Instructor: Boyte, Harry C  
Description: Student may contact the instructor or department for information.

PA 4101 Nonprofit Management and Governance
3 credit(s);  
Instructor: Rojas, Allison Langell  
Description:  
Style: 25% Lecture, 50% Discussion, 25% Small Group Activities.  
Grading: 40% reports/papers, 30% special projects, 20% quizzes, 10% class participation.

PA 4190 Topics in Public and Nonprofit Leadership and Management: Social Entrepreneurship
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Donovan, Terry  
Description:

PA 4200 Urban and Regional Planning
3 credit(s);  
Instructor: Douma, Frank P  
Description: This course is geared toward upper division undergraduates and graduate students who are curious about a career in urban and regional planning, or simply want to know how planning works and affects our lives. It is an introductory class that gives an overview of planning theory and practice, with primary attention to current issues in planning practice in the U.S. The content covers land use, urban design, transportation, community development, housing, and environmental planning problems within the broader context of the historic development of cities, political processes, and regional and national economic forces. Attention to the planning process, or how planning actually occurs, represents a constant theme in the course. We will engage the material in three ways: An Overview of Cities and Urban Planning; Urban Planning Tools and Practice; and Perspectives and Strategies in Planning After this course, you will be expected to: Identify how major social, political, and economic forces have shaped urban development in the U.S.; Understand the primary tenets of the urban planning profession; Describe approaches for examining urban form and function; Discuss whose interests are served (and not served) by urban planners and plans; and Evaluate and suggest responses to current policy and planning challenges affecting U.S. urban areas, with a particular focus on the Twin Cities. Over the course of the semester, you will gain an appreciation for the complexity of urban areas and an understanding of what urban planners do and the possibilities and limitations that they face. In summary, if you have any interest in knowing how cities and metropolitan areas develop and function the
way they do, you should find the class interesting, and engaging, and perhaps even enjoyable!

**Style:** 40% Lecture, 35% Discussion, 5% Small Group Activities, 10% Guest Speakers, 10% Service Learning.

### PA 4490 Topics in Social Policy: Community Organizing for Effective Public Policy

- **Credits:** 2 credit(s), max credits 9, 3 completions allowed;
- **Instructor:** Donovan, Dennis Michael
- **Description:**

### PA 4961W Leadership for Global Citizenship

- **A-F only, 3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Werner, Linnette
- **Description:** This course, the capstone academic experience in the Undergraduate Leadership Minor sequence, is designed to focus student learning that has been developed in earlier leadership courses. Leadership theory, community building, social change, and interdisciplinary approaches to complex global issues will be the main components in this course. Students will be expected to demonstrate skill in analysis of pertinent literature, write with purpose and clarity, appreciate intense internships, and lead thoughtful group study. In this course, students will finalize portfolios and submit other scholarly products to demonstrate a mature understanding of personal and positional leadership in a changing global context.

### PA 4961W Leadership for Global Citizenship

- **A-F only, 3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Asmundson, Aaron R
- **Description:** Student may contact the instructor or department for information.

### PA 5002 Introduction to Policy Analysis

- **A-F only, 1.5 credit(s);**
- **Instructor:** Myers Jr, Samuel L
- **Description:** The goal of this course is to provide you with an introduction to policy analysis and a better understanding of where it fits within the policy process. Policy analysis provides advice to help citizens, policy-makers, and others solve problems, and it is as much a craft as a science. We will learn several specific policy analytic skills: developing a problem context, problem structuring, developing alternative policy options monitoring, evaluation, forecasting, policy simulation, and recommendation. In doing so, we will use different analytical tools, seek to understand the larger policy-context, and practice communicating policy advice.

### PA 5003 Introduction to Financial Analysis and Management

- **A-F only, 1.5 credit(s);**
- **Instructor:** Kiedrowski, P. Jay
- **Description:** This is an introductory course to budgeting and financial analysis in the context of public and nonprofit organizations. The primary learning objective of this course is how to obtain accurate financial information to make sound management decisions through the analysis of financial documents such as budgets and financial statements. The processes of producing such documents will be introduced but are not the focus of this course. Conceptual frameworks and analytical techniques will be emphasized and applied to analyze real-world financial problems. Lectures, discussions, and cases/examples from nonprofit and public sector organizations will be utilized.
- **Style:** 50% Lecture, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Demonstration.
- **Grading:** 30% mid exam, 30% final exam, 25% reports/papers, 15% class participation.

### PA 5004 Introduction to Planning
PA 5011 Management of Organizations
A-F only, 3 credit(s);
Instructor: Bielefeld, Wolfgang Hor
Description:

PA 5011 Management of Organizations
A-F only, 3 credit(s);
Instructor: Stone, Melissa M
Description: Challenges facing higher-level managers in public/nonprofit organizations in a mixed economy and democratic republic. Distinctive features of public/nonprofit management, skills necessary for effective management, manager's role as creator of public value. Lectures, case discussions.
Style: 25% Lecture, 50% Discussion, 25% Small Group Activities.
Grading: 60% reports/papers, 15% in-class presentation, 15% class participation, 10% other evaluation.

PA 5011 Management of Organizations
A-F only, 3 credit(s);
Instructor: Quick, Kathy
Description: This course is designed to provide students a foundation of knowledge about public and nonprofit organizations, to help you think and act from the perspective of a manager considering ways to strengthen the work of organizations. To create that foundation, we focus on organizations and different ways to analyze them. Through active participation, you will become acquainted with the basic concepts, competencies, and skills needed to manage and lead organizations involved in making and carrying out policies and programs to address public issues. The course moves through the various levels of organizational behavior. We begin with your own skills and consider how to use them to work effectively in groups. We then consider the elements of organizations and the character of the larger environment that shapes what happens within them and how they interact with other organizations. Throughout, you will come to see that organizations operate as systems within particular contexts that provide both opportunities and constraints.
Style: 20% Lecture, 5% Film/Video, 30% Discussion, 20% Small Group Activities, 15% Student Presentation, 10% Web Based.
Grading: 55% reports/papers, 20% in-class presentation, 15% class participation, 10% other evaluation. 10% of final grade is peer-to-peer evaluation of performance on team project.

PA 5012 The Politics of Public Affairs
A-F only, 3 credit(s);
Instructor: Burns, Melanie Faith
Description: What is desirable from the perspective of policy analysis and policy expertise is not always what is legislatively feasible in the face of established institutions and multiple and competing interests and values. Although the impetus for pursuing apolitical approaches to making public policy is understandable, it often rests on decision-making models that circumvent or diminish democratic processes and side step critical issues related to political power. The purpose of this course is to illuminate the obstacles and opportunities that shape the development of public policy in the United States. We will cover the fundamentals of policy analysis, including academic theories, political actors and key processes.
Grading: 20% final exam, 20% reports/papers, 20% special projects, 20% written homework, 10% in-class presentation, 10% class participation.
Exam Format: Mixed-Method

PA 5013 Law and Urban Land Use
A-F only, 1.5 credit(s);
Instructor: Coleman, Jean Lynn
Description:

PA 5021 Economics For Policy Analysis and Planning I
A-F only, 3 credit(s);
Instructor: Le, Thanh Trung
Description:

PA 5021 Economics For Policy Analysis and Planning I
PA 5021 Economics For Policy Analysis and Planning I
A-F only, 3 credit(s);
Instructor: Le, Thanh Trung
Description: Introduction to tools useful for public policy: intermediate microeconomics, macroeconomics, concepts of international trade.

PA 5022 Economics For Policy Analysis and Planning II: Economics of Early Childhood Education
A-F only, 3 credit(s), max credits 4.5, 3 completions allowed;
Instructor: Rolnick, Arthur Jeffrey
Description: In this course we examine early childhood development (ECD) from an economic perspective, viewing ECD as economic development. Students will become familiar with the role of government in a market economy with a specific focus on the role of ECD and human capital in general in economic growth and development. Students will learn about the newer research from longitudinal studies of ECD as well as newer studies of early brain development. Students will develop an understanding of the basic features of cost-benefit (or return on investment) analysis as a tool for efficient resource allocation. The second half of the class requires students to become familiar with and to be able to critically evaluate studies of the effectiveness of various ECD policies. Specific programs or policies will be examined with an emphasis on identifying the characteristics of rigorous evaluations. The course ends with a discussion of the local, national and international policy environment in the area of early childhood development.

PA 5031 Empirical Analysis I
A-F only, 4 credit(s);
Instructor: Le, Thanh Trung

PA 5031 Empirical Analysis I
A-F only, 4 credit(s);
Instructor: Levison, Deborah
Style: 40% Lecture, 8% Discussion, 40% Laboratory, 12% Small Group Activities.
Grading: 25% final exam, 25% reports/papers, 45% quizzes, 5% class participation. Grading percentages are approximate. Class participation includes group preparation and participation.
Exam Format: Written, in-class.

PA 5031 Empirical Analysis I
A-F only, 4 credit(s);
Instructor: Bielicki, Jeffrey
Description:

PA 5038 Analytics for Leaders I
A-F only, 2 credit(s);
Instructor: Le, Thanh Trung
Description:

PA 5041 Qualitative Methods for Policy Analysts
A-F only, 4 credit(s);
Instructor: Fennelly, Katherine
Description: This class is designed to introduce students to several qualitative analysis techniques and to provide hands-on experience in designing, gathering and analyzing data. After successfully completing this course students should be able to: Determine when to use interviews, observations and discourse or document analysis, and combinations of quantitative and qualitative data; Design questions and protocols appropriate to each method; Apply basic techniques to analyze data; and Honor confidentiality and respect sensitivity of data collection methods from the perspective of clients.
PA 5051 Cohort Leadership I
A-F only, 2 credit(s);
Instructor: Zentner Bacig,Karen
Description: Student may contact the instructor or department for information.

PA 5053 Cohort Policy Analysis I
A-F only, 2 credit(s);
Instructor: Zentner Bacig,Karen
Description: Student may contact the instructor or department for information.

PA 5055 Cohort Quantitative Analytics I
A-F only, 2 credit(s);
Instructor: Le,Thanh Trung
Description: Student may contact the instructor or department for information.

PA 5080 Capstone Preparation Workshop
S-N only, 1 credit(s);
Instructor: Borton,Kimberly Joy
Description: The capstone preparation workshop prepares students to be successful in their capstone projects. The course builds student competencies in project and group management, and provides the necessary frameworks needed to complete capstone course. Additional topics covered include an overview of action research methodologies, client relations, and project development tools. Over the duration of the two week session, students complete drafts of team contracts, client memoranda of agreement, and timelines for project deliverables.
Style: 50% Lecture, 5% Film/Video, 25% Discussion, 20% Small Group Activities.
Grading: S/N

PA 5101 Management and Governance of Nonprofit Organizations
3 credit(s);
Instructor: Wirth-Davis,Michael Eric
Description: Theories, concepts, and real world examples of managerial challenges. Governance systems, strategic management practices, effect of funding environments, management of multiple constituencies. Types of nonprofits using economic/behavioral approaches.

PA 5103 Leadership and Change in an Innovation Society
3 credit(s);
Instructor: Crosby,Barbara C
Description: Change is often built into definitions of leadership, and certainly many scholars and practitioners have written about how leaders can foster change in their organizations or communities. Moreover, understanding the links between leadership and change takes on increased urgency as the United States and other countries strive to foster an ?innovation economy? and navigate through complex, turbulent political terrain. Leaders will need conceptual tools and practical skills to promote innovative organizations that thrive in and contribute to an innovative society. Accordingly, this seminar will examine models of change and models of leadership and investigate how leaders can promote desirable personal, organizational and societal change. Case studies and action research will be emphasized. An important class product will be a framework for leadership and change in an innovation society. During each class session, one or two learners will be responsible for recording ?takeways? from the evening?s conversation. When participants complete this course, they will have knowledge, skills, wisdom, and motivation that enable them to practice personal, team, organizational and societal leadership aimed at innovation for the common good.
Grading: 35% reports/papers, 25% reflection paper, 30% class participation, 10% other evaluation.

PA 5104 Strategic Human Resource Management
A-F only, 3 credit(s);
Instructor: Kiedrowski,P. Jay
Description: Theory/practice of developing, utilizing, and aligning human resources to improve culture/outcomes of nonprofit/public organizations. HR strategy, individual diversity, leadership, selection, training, compensation, classification, performance appraisal, future HR practices.
Style: 40% Lecture, 30% Discussion, 20% Student Presentation, 10% Guest Speakers.
Grading: 45% reports/papers, 30% in-class presentation, 25% class participation.
PA 5190 Topics in Public and Nonprofit Leadership and Management: Social Entrepreneurship  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Bielefeld, Wolfgang Hor  
Description:  

PA 5190 Topics in Public and Nonprofit Leadership and Management: Creating Public Value  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Bloomberg PhD, Laura L  
Description:  

PA 5190 Topics in Public and Nonprofit Leadership and Management: Managing Conflict: Negotiation  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Anderson Kelliher, Margaret E  
Description: This highly interactive prepares students for professional negotiation in a variety of arenas. The development of conflict resolution skills will help students as they navigate through diverse audiences and a world that is increasing in its complexity every day. This portfolio of conflict solving skills is a must for every student of public policy and affairs and those who will be interacting with the public sector in a professional role. The course will introduce students to the theory and practice of negotiation and provide opportunities to test out skills and learn from experts. In-class sessions will include a number of structured exercises in which students will negotiate issues ranging from professional compensation, union conflicts, and international development.  
Style: Lecture, Discussion, and Negotiation Exercises. Possible guest speakers.  
Grading: 35% reports/papers, 30% class participation. 35% is for reflections and on-line posts.  

PA 5190 Topics in Public and Nonprofit Leadership and Management: Managing Civic Engagement  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Quick, Kathy  
Description: This practice-oriented course introduces approaches and techniques for organizing participatory decision-making and problem-solving efforts. Students gain critical perspectives through foundational readings about the purposes and challenges of engagement and through analysis of examples from cases, guest speakers, and community-based observations. As important, all students gain competence in a range of methods through hands-on experience with planning, leading, and participating in different engagement and facilitation practices in weekly classroom exercises. This course is relevant for students who want to build their capacities for organizing public engagement in making policies, plans, and programs, as well as for those interested in community organizing, democratic decision-making within public and nonprofit organizations, or participatory program design and evaluation.  
Style: 10% Lecture, 25% Discussion, 25% Laboratory, 25% Small Group Activities, 5% Guest Speakers, 10% Web Based.  
Grading: 50% reports/papers, 20% written homework, 10% in-class presentation, 20% class participation. This class is not for bystanders. 20% of grade is based on quality of contribution to class discussion; 10% on facilitating a class session, 50% on three short papers, and 20% on weekly reading notes.  

PA 5211 Land Use Planning  
3 credit(s);  
Instructor: Fan, Yingling  
Description: To land use planners, the perennial question is how land use planning can be applied to create human settlement patterns that promote sustainable, equitable, and livable outcomes in metropolitan regions, cities, towns, and villages. Answers to this question are explored in this course with a focus on real-world planning process and implementation. Students will be exposed to a variety of methods and techniques available to planning practitioners to create and implement high-quality land use plans. Skills covered in this course include analysis and synthesis skills; oral, graphic, and written communication skills; and skills for working effectively as a member of a planning team and with community stakeholders. By the end of this course, students should be able to articulate a clear vision of what constitute an effective local land use plan and be able to describe a range of possible plan formats. Students should be able to specify the components of a complete land use planning program, and know where a plan fits into such a program. Students should have developed a dependable sense of judgment for assessing the validity, effectiveness, feasibility, strengths and weaknesses of various land use plan-making methods and plan formats. More specifically, this course will help students learn how to formulate a land use plan in a professional manner and appropriate to the community context by actually making a plan for a small-size hypothetical city. Tasks to be mastered in this course include: 1. Describe and assess existing and emerging community conditions; 2. Formulate goals and objective towards a community vision statement; 3. Translate projections of economic and population changes into their land use implications for land, location, and community services; 4. Determine the suitability of land and locations for various land uses; 5. Apply computer technology to specific plan-making tasks such as map presentations, land suitability analyses, and the drawing of plans; 6. Design a future urban form that meets the community’s objectives, accommodates the future population and economy, and incorporates community aspirations for a quality of life; and 7. Outline a development management program that helps bring such a future.
PA 5231 Transit Planning and Management
- Instructor: Cao, Jason

PA 5232 Transportation Policy, Planning, and Deployment
- Instructor: Levinson, David M
  - Description: This course aims to provide an environment for students to learn essential facts and develop models and frameworks to understand the development of transportation policy, the making of transportation plans, and the deployment of transportation technologies. The course uses a mixture of traditional lectures (generally on Mondays), and interactive learning through case studies and role playing (generally on Wednesdays). Both the lectures and the cases allow the students to develop an inductive understanding of transportation. The course will be successful if at the end, the student has developed a worldview on transportation (not necessarily the same as the instructor's), and has an appreciation for merits and demerits of various points of view on transportation issues. The course seeks an integrative approach for transportation, and though the stories in lecture will be told mode by mode, there are a number of opportunities to see the relationships between modes, in their structure in function, and in the learning as one mode adopts successful (and unsuccessful) attributes of others. See syllabus in Course URL.
  - Style: 50% Lecture, 50% Discussion.
  - Grading: 20% mid exam, 20% final exam, 40% reports/papers, 20% class participation.

PA 5251 Strategic Planning and Management
- Instructor: Ohmann, Laurie
  - Description: This course examines the theory and practice of strategic planning and management for governments, public agencies, nonprofit organizations, collaborations, and, to a lesser extent, communities. The design of the course has been strongly influenced by experiential learning theory, including David Kolb's learning cycle and James Zull's views on improving the practice of teaching based on the biology of learning. Most classes will be in two parts. The first part will utilize a discussion or lecture-discussion format focused on the topic and readings for the week. The second part will involve an examination, discussion, and reflection on a specific case, instruction in a specific technique, or simulation exercises. Periodic individual, team, and class assessments will be utilized.
  - Style: 25% Lecture, 25% Discussion, 25% Small Group Activities, 20% Student Presentation, 5% Guest Speakers.
  - Grading: 30% reports/papers, 20% written homework, 15% journal, 10% in-class presentation, 20% class participation, 5% other evaluation. The Journal percentage encompasses online questionnaires, reflections on readings, surveys, & evaluations.

PA 5271 Geographic Information Systems: Applications in Planning and Policy Analysis
- Instructor: Bolan, Richard Stuart

PA 5271 Geographic Information Systems: Applications in Planning and Policy Analysis
- Instructor: Fan, Yingling
  - Description: Geographic Information Systems (GIS) is an increasingly growing field, providing spatial data management and analysis services to a broad range of business and public organizations. In 1999, US News identified the GIS occupation as one of the ?21 hot jobs for the 21st century?, claiming that the number of GIS positions in local governments alone will rise from 20,000 to 36,000 by the year 2010. The use of GIS is inevitable in urban planning and public policy as both fields involve exploring location-related trends and issues. For instance, planners routinely conduct geo-spatial analyses to study residential clustering, to explore the spatial mismatch between jobs and workers, and to identify suitable land for urban transition, infill development, or environmental conservation. To public policy professionals, GIS facilitates spatial visualization of poverty, crime, pollution, and health patterns, allowing those who on the front line of public services to distribute tax money more fairly and to protect life and property more effectively. In simple words, GIS skills are a valuable asset in today?s competitive job market. This course covers GIS basics (e.g., map projections, coordinate systems, spatial data manipulation & visualization, and geodatabase management) as well as advanced GIS applications (e.g., network analysis, raster & TIN models, socio-demographic analysis, 3-D analysis, hot-spot analysis, spatial interpolation, and other spatial statistics). It gives special attention to making GIS useful to urban planners and policy analysts. It is not intended to make students into GIS coding, spatial modeling or spatial statistics experts ? those interested in a GIS-based career path should continue to take programming and database courses in Computer Science and advanced GIS offerings in the Department of Geography.
PA 5281 Immigrants and Cities
A-F only, 3 credit(s);
Instructor: Allen,Ryan Patrick
Description: This course examines the impact of contemporary immigration in the U.S. on urban planning and public affairs. Specifically, it engages several important questions: How have immigrants changed cities in the U.S.? What kind of social, political and economic experiences do immigrants have once they arrive in the U.S.? How can urban planners and public policy makers fashion plans and policies that expand the opportunities and improve outcomes and improve outcomes for immigrants? To help answer these questions, we focus on the following areas: immigration theory, the residential settlement patterns of immigrants, labor market outcomes, community formation, and examples of effective (and ineffective) practices for working with immigrants in planning and public policy contexts.
Style: 40% Lecture, 25% Discussion, 15% Small Group Activities, 10% Guest Speakers, 10% Service Learning.

PA 5311 Program Evaluation
3 credit(s);
Instructor: Bloomberg PhD,Laura L
Description: This course will explore the complexities and realities of conducting evaluation studies in community-based settings, including schools, non-profit organizations, and collaborative initiatives. The class will use a case study approach to compare and contrast different evaluation projects-from establishing guiding evaluation questions to instrumentation, data collection, data analysis, and presentation of findings to multiple audiences. Primary emphasis will be on evaluation ethics, theory-based evaluation and logic modeling in real world settings. Over the course of the semester, students will design and develop their own comprehensive evaluation plan for a selected program. "The art of evaluation involves creating a design and gathering information that is appropriate for a specific situation and particular policymaking context. In art there is no single, ideal standard. Beauty is in the eye of the beholders, and the evaluation beholders include a variety of stakeholders: decision makers, policy makers, funders, program managers, staff, program participants, and the general public. Any given design is necessarily an interplay of resources, practicalities, methodological choices, and personal judgments by the people involved". (Michael Quinn Patton, 2004)
Style: 30% Lecture, 30% Discussion, 20% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.
Grading: 20% reports/papers, 30% special projects, 20% written homework, 20% in-class presentation, 10% class participation.

PA 5401 Poverty, Inequality, and Public Policy
3 credit(s);
Instructor: Jefferys,Marcie
Description:

PA 5422 Diversity and Public Policy
A-F only, 3 credit(s);
Instructor: Myers Jr,Samuel L
Description: This course surveys what every policy analyst ought to know about diversity. The lectures and discussions draw upon the literatures on a) the economics of diversity; b) the business and public administration cases for workplace diversity; c) the value of cultural competency in public and non-profit organizations; and d) current policy debates about how and whether diversity competes with other policy objectives, such as efficiency and equity. See syllabus in Course Guide for more information.

PA 5451 Immigrant Health Issues
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;Grad student or instr consent Credit will not be granted if credit has been received for: PUBH 6281;
Instructor: Councilman,Robin M
Description: This course focuses on how to access demographic, health, and background information on immigrant populations; characteristics and health needs of immigrants.; designing culturally competent health programs; and advocating for change to promote immigrant health. Community visits required. Highly structured online course with weekly reading, community work, research, video, and on-line posting assignments. Also 1 research project for 3 credit students, 2 for 4 credit students. 2 big community work assignments..
Style: 10% Film/Video, 90% Web Based. On-line discussion and small group on-line chats are requires
Grading: 40% reports/papers, 15% quizzes, 15% class participation, 30% other evaluation. Please see the syllabus as the grading is very different between 3 and 4 credit students.

PA 5490 Topics in Social Policy: Economics of Early Childhood Education
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Rolnick,Arthur Jeffrey
Description:
PA 5490 Topics in Economic and Community Development: Economic Competitiveness
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Slawik,Nora B
Description: If you want to learn directly from legislators, early education professionals, economists, lobbyists and other social scientists about state, federal and international policies affecting young children and their families this class is essential. We will explore readings and expert speaker presentations on family, community and institutional roles in promoting children's social, cognitive and emotional development and their acquisition of language and pre-literacy skills. This course illuminates the gaps between the science of early childhood development and how public policies support young children and their caregivers. Classroom discussions will focus on innovative public policies and financing affecting young children and their physical and mental health care, poverty influences, quality child care, economics, special needs and workforce issues. Graduate students in the areas of early childhood and public policy as well as community members with experience in the early childhood field are the intended audience. This class is the cornerstone of the Early Childhood Policy Certificate program, a postbaccalaureate sequence intended to develop individuals' capacity to apply research-informed knowledge for sustainability to federal and state policy affecting children up to age 8.

Style: 20% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 20% Guest Speakers. Experts in the areas related to young children speak regularly on kindergarten readiness, statistical preschool studies, legislation, poverty, economics and workforce issues.
Grading: 40% reports/papers, 10% special projects, 30% written homework, 10% attendance, 10% class participation. Class attendance also weighs into the final grade if the student misses more than two of the weekly classes.

PA 5501 Theories and Policies of Development
3 credit(s);
Instructor: Friedemann-Sanchez,Greta
Description: Economic and human development theories/strategies throughout world. Competing theoretical paradigms. Policy debates. Poverty/inequality, rural development, trade policy, health, education, gender, the environment.

PA 5522 International Development Policy, Families, and Health
3 credit(s);
Instructor: Friedemann-Sanchez,Greta
Description: Whether in an Andean town or a city in the United States, family members negotiate how to spend money and time; who should be employed for pay; who should care for the young, the elderly and the ill; and even how much physical abuse one individual can inflict on another. Surprisingly, until recently it was assumed that households functioned as single decision-making units and that providing resources to heads of households, usually assumed to be men, would improve the well-being of all members of the household. It is now known that households do not behave as cohesive units; bargaining over the allocation of resources is intensely conditioned by gender-based power differentials. In order to guide development policy, scholars strive to understand what augments or diminishes bargaining power. Property ownership, wage income, paid and unpaid work, individual health, and social capital among other elements are all interrelated in a complex web, and all have implications for an individual's bargaining power within the household. In addition, all of these factors are heavily influenced by gendered cultural norms and expectations. Through readings, lectures and discussions, this course will invite students to explore the implications of paid and unpaid labor for development policy using household economics and family health as a prism. After studying various theoretical frameworks of household economics and family health, a range of topics will be explored including property ownership, the legal and cultural use of property rights, the financial effects of ill health, and the feedback loop that financial strain places on health, as well as work-family conflict and policies that alleviate such conflict. The role of gender and an overview of qualitative methods used in this field will be incorporated throughout the course.

PA 5590 Topics in Economic and Community Development: Economic Competitiveness
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Munnich Jr,Lee William
Description: The course examines both advanced and developing economics and addresses competitiveness at multiple levels -- nations, sub-national units such as states or provinces, particular cluster, and neighboring countries. The course is concerned not only with government policy, but also with the roles that firms, industry, associations, universities, and other institutions play in competitiveness. In modern competition, each of these institutions has an important and evolving role in economic development. Moreover, the process of creating and sustaining an economic strategy for a nation, state or region is a daunting challenge. The course explores not only theory and policy but also the organizational structures, institutional structures, and change processes required for sustained improvements in competitiveness. The course is based on a case-study course developed by Professor Michael Porter and a team of his colleagues at the Harvard Business School. The course explores the determinants of national and regional competitiveness building from the perspective of firms, clusters, sub-national units, nations, and groups of neighboring countries. It focuses on the sources of national or regional productivity, which are rooted in the strategies and operating practices of locally based firms, the vitality of clusters, and the quality of the business environment in which competition takes place. The course is taught using case studies drawn from all major regions of the world. Part of the purpose of the course is to expose students to some of the most successful countries and regions. In addition to cases, there are readings, a series of video lectures by Michael Porter, and videotaped
appearances by guests who are national, regional, or business leaders involved in the cases studied. The class format will consist of case studies, lectures, guest speakers, and a strong emphasis on teamwork and class participation. Team members will be expected to prepare and present a regional economic and cluster analysis and strategy, to give an oral presentation to a guest jury, and to assess their own performance as a team. Students will also be asked to critique a past regional cluster study and to conduct a case study presentation and discussion with the class.

Grading: 35% reports/papers, 10% reflection paper, 15% in-class presentation, 30% class participation, 10% other evaluation. Other Evaluation: Teamwork - team member assessments 10% Class Participation (30%) includes case study participation, a cluster study critique and team case study presentation in class. See syllabus for more details.

Exam Format: No exam

**PA 5601 Survey of Women, Law, and Public Policy in the United States**

3 credit(s);
Instructor: Laughlin,Kathleen Anne

Description: Public policy is gendered. The gendered aspects of public policy formation in the United States are vividly clear in the 2012 election year. The so-called "culture wars" have been revived in campaign rhetoric, proposed legislation, and in controversies over reauthorization of laws affecting women's status. The proposed Pay Check Fairness Act and reauthorization of the Violence Against Women Act have engendered unprecedented attention in the public square. Democrats have claimed that Republicans have engaged on a "war on women." Republicans have countered this charge with claims that President Obama's economic policies are hurting women and their families. A "gender gap" could determine the outcome of the 2012 election. Moreover, several women are running for coveted U.S. Senate seats that could tip the balance of power in Congress; the number of women running for Senate as incumbents or challengers in the Midwest is historic: Tammy Baldwin in Wisconsin; Amy Klobuchar in Minnesota; and Claire McCaskill in Missouri. This course will analyze the campaign strategies, platforms, and rhetoric of 2012 election by engaging with public policy analyses presented in the fields of history, sociology, political science, and legal studies. We will explore in-depth three policy issues that are animating contemporary politics: employment, reproductive rights, and entitlement reform. We will consider how barriers to women's full citizenship in the past, assumptions of female difference, and the intersection of race, class, sexual orientation, and other mutually constituting categories continue to influence politics and policy today.

Style: 20% Lecture, 70% Discussion, 10% Guest Speakers.

Grading: 70% reports/papers, 15% reflection paper, 15% class participation. Two book reviews are required. Reflection papers and participation 30% of final grade. The remaining grade from research assignments, including literature review.

**PA 5711 Science and Technology Policy**

3 credit(s);
Instructor: Kuzma,Jennifer

Description: This course will provide an overview of public policies and issues involving or affected by science and technology (S&T). The breadth of the class precludes a comprehensive coverage of any one subject, but through the themes, subthemes, and issue-based case studies, students will gain a broad understanding of S&T policy, in addition to basic concepts of policy analysis. Overarching themes will include history and evolution of S&T policy; the current system and the interactions and conflicts within and surrounding it; the relationships among citizens, experts, organizations and cultures; R&D support infrastructure and effects on economies and society; and responsible governance of S&T. Various challenges and opportunities for science and technology will be considered within a social context. Sub-themes for the course include national and international funding of R&D; S&T in development; intellectual property and its impacts; contemporary institutional roles; public engagement and participatory processes; ethical and cultural frameworks for S&T policy; capacity building in developing countries; health and well-being of societies and ecosystems as related to S&T; and security in the context of S&T policy. The first half of the course will focus on the general themes and sub-themes, and the second half will focus on particular S&T policy topics to illustrate these themes (genetically engineered organisms, nanotechnology, emerging medical biotechnology, ecology and biodiversity, global health, national biodefense and security).

Style: 30% Lecture, 25% Discussion, 25% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.

Grading: 40% reports/papers, 20% written homework, 20% in-class presentation, 20% class participation.

**PA 5721 Energy and Environmental Policy**

3 credit(s);
Instructor: Wilson,Elizabeth Joan

Description: Impact of energy production/consumption choices on environmental quality, sustainable development, and other economic/social goals. Emphasizes public policy choices for energy/environment, linkages between them.

**PA 5802 Global Economic Policy**

3 credit(s);
Instructor: Kudrie,Robert T

Description: The global economy poses many challenges to nation states and to the aspirations of various national and transnational social groups. This course looks at some of those challenges and the associated policy responses
involve formally agreed international rules, and most of those rules lack specific enforcement mechanisms. This is not surprising because most of the policy challenges emerged gradually over time, and nation-states have attempted to deal with them while maintaining as much national prerogative as possible. Much of the story of the governance of the global economy can therefore be seen as mixtures of information sharing and light coordination. Stronger governance such as the World Trade Organization and the International Monetary Fund are exceptions. The course will explore the economic logic of globalization and national policy objectives. It will deal with specific policies and institutions related to international trade (including the WTO and regional pacts such as NAFTA); international finance (including the International Monetary Fund); global aspects of resources and the environment; immigration and emigration; and development (including the UN and the World Bank).

Grading: 25% mid exam, 35% final exam, 20% reports/papers, 5% in-class presentation, 15% class participation.

PA 5890 Topics in Foreign Policy and International Affairs: Globalization and the World Food Supply
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Johnson, Robbin S
Description: The course examines the effects of markets, governmental policies and the process of globalization on world food, feed and fuel from biomass production. The course begins with a look at why agricultural issues are important both in developed countries and in poorer countries struggling to escape their poverty and hunger. It reviews the kinds of policy choices that are made with respect to agricultural production, international trade and, more recently, biofuels development. It looks at how these choices and the policy choices made with respect to each have evolved. It compares those choices with their effects. And it asks whether alternative policy choices would be better, in what ways and for whom. (See syllabus on Course Guide for more information.)

PA 5910 Developing Your Public Service Career
S-N only, 1 credit(s);
Instructor: Schuman, Lynne Roberta
Description: This course provides Humphrey students with the knowledge and analytic tools to manage their own career development. Students look at the changing nature of public work and public service career options. They analyze and document their individual interests, skills and abilities and create a career exploration plan. Finally, they meet professionals from a variety of public service careers in a series of panel discussions.
Style: 20% Lecture, 20% Discussion, 20% Small Group Activities, 40% Guest Speakers.
Grading: 50% reports/papers, 50% reflection paper.

PA 5920 Skills Workshop: Community Organizing for Effective Public Policy
2 credit(s), max credits 12, 12 completions allowed;
Instructor: Donovan, Dennis Michael
Description:

PA 5920 Skills Workshop: Boards Services Practicum
1.5 credit(s), max credits 12, 12 completions allowed;
Instructor: Stone, Melissa M
Description: This is a year-long course for students who sit on nonprofit boards of directors or a board committee. The class meets once a month for two hours and discusses challenges of board work, meets with local governance experts, and explores the research and practice literature about effective board governance.

PA 5920 Skills Workshop: Professional/Plan B Paper Seminar
1 credit(s), max credits 12, 12 completions allowed;
Instructor: Levison, Deborah
Description: Student may contact the instructor or department for information.

PA 5920 Skills Workshop: Using Social Media Strategically
1 credit(s), max credits 12, 12 completions allowed;
Instructor: Lundquist, Leah Marie Doerr
Description: How can social media further an organization's mission or fuel a social entrepreneurial vision? What is its return on investment? How does one navigate the public/private line? Through real-world examples and hands on practice, this skills workshop will 1) introduce and deepen students' understanding of the current social media landscape, 2) explore how to connect the use of social media efforts to a public or nonprofit organization's strategic priorities, 3) uncover best practices in implementing, scaling, and maintaining social media use and 4) provide methodology and tools for measuring the value in social media. Students will walk away equipped and inspired to use social media to advance personal and organizational goals. Meets biweekly in September and October. 4 Saturdays from 9 am - 12:30 pm: 9/15, 9/29, 10/13, 10/27

PA 5920 Skills Workshop: Portfolio Preparation Workshop
PA 5941 Leadership for the Common Good
A-F only, 4 credit(s);
Instructor: Zentner Bacig,Karen
Description: Main contact: Barbara C. Crosby. Fall 2012 PA 5941 Leadership for the Common Good Wed. 5:45 pm 9:05 pm Course Goals Understand theories, tools, and strategies of leadership. Understand how policy entrepreneurs develop and manage ideas for achieving the common good. Build a learning community. Assist learners in developing leadership strategies for their own work. Course Design This course is a participatory seminar designed to engage students in study, thought, discussion and reflection on eight capabilities of leadership: Leadership in Context, Personal Leadership, Team Leadership, Integrative Leadership, Organizational Leadership, Visionary Leadership, Political Leadership, Ethical Leadership, and Policy Entrepreneurship. In order to ensure that the course helps learners develop strategies for their own leadership work, everyone develops his or own leadership case throughout the course. Learners are assigned to an action learning group that typically meets for the hour before each class, or at another time convenient to the members. The groups provide opportunities to: o Review and discuss readings o Focus on learners’ leadership cases, using exercises and other assignments o Build learning relationships o Prepare for class sessions o Complete a group integrative leadership memo and report Credit Requirements and Grading for A-F Participation -- Attend class and study groups; contribute to discussion. Post bio sketch on web; post study group norms. Turn in evaluations of your study group members; participation. (20%) Reflection Leader: Each person will serve as a reflection or wrap up leader. (5%) Individual Leadership Project a. Initial leadership project statement. * If instructor requires revisions, a new draft responding to their comments must be posted later. See course website and grid for further guidance. (6%). b. Application of personal leadership to the project. (7%) c. Application of team leadership concepts to the group dynamics (7%) d. Action learning project paper (25%) Group Project a. Integrative Leadership Project memo (7%) b. Integrative Leadership Project report (13%) c. Project presentation (10%)

PA 5941 Leadership for the Common Good
A-F only, 4 credit(s);
Instructor: Crosby,Barbara C
Description: Main contact: Barbara C. Crosby. Fall 2012 PA 5941 Leadership for the Common Good Wed. 5:45 pm 9:05 pm Course Goals Understand theories, tools, and strategies of leadership. Understand how policy entrepreneurs develop and manage ideas for achieving the common good. Build a learning community. Assist learners in developing leadership strategies for their own work. Course Design This course is a participatory seminar designed to engage students in study, thought, discussion and reflection on eight capabilities of leadership: Leadership in Context, Personal Leadership, Team Leadership, Integrative Leadership, Organizational Leadership, Visionary Leadership, Political Leadership, Ethical Leadership, and Policy Entrepreneurship. In order to ensure that the course helps learners develop strategies for their own leadership work, everyone develops his or own leadership case throughout the course. Learners are assigned to an action learning group that typically meets for the hour before each class, or at another time convenient to the members. The groups provide opportunities to: o Review and discuss readings o Focus on learners’ leadership cases, using exercises and other assignments o Build learning relationships o Prepare for class sessions o Complete a group integrative leadership memo and report Credit Requirements and Grading for A-F Participation -- Attend class and study groups; contribute to discussion. Post bio sketch on web; post study group norms. Turn in evaluations of your study group members; participation. (20%) Reflection Leader: Each person will serve as a reflection or wrap up leader. (5%) Individual Leadership Project a. Initial leadership project statement. * If instructor requires revisions, a new draft responding to their comments must be posted later. See course website and grid for further guidance. (6%). b. Application of personal leadership to the project. (7%) c. Application of team leadership concepts to the group dynamics (7%) d. Action learning project paper (25%) Group Project a. Integrative Leadership Project memo (7%) b. Integrative Leadership Project report (13%) c. Project presentation (10%)

PA 5990 Topics: Public Affairs--General Topics: Northside Achievement Zone (Fall)
1 credit(s), max credits 9, 6 completions allowed;
Instructor: Rolnick,Arthur Jeffrey
Description: Student may contact the instructor or department for information.

PA 5990 Topics: Public Affairs--General Topics: Engaging the Public in Policy and Planning
3 credit(s), max credits 9, 6 completions allowed;
Instructor: Peacock,Stephen Neal
Description: Engaging the Public in Policy and Planning (PA 5990 / PA 8081) was proposed by and developed in consultation with Humphrey students who were interested in community based research and committed to engaging Humphrey Institute and other University of Minnesota students in community-based initiatives to strengthen the Cedar Riverside neighborhood. Since the 2007-2008 academic year when the course was first offered, students have completed twenty one different projects with neighborhood organizations, including the Brian Coyle Community Center, the Cedar Riverside Neighborhood Revitalization Program, the West Bank
PA 5990 Topics: Public Affairs--General Topics: Capstone in Global Public Policy
0 credit(s), max credits 9, 6 completions allowed;
Instructor: Gray, Sherry
Description: This capstone is designed for students in the global policy area and economic and community development (international) and any other MPP and MPA concentrations at the Humphrey School with an interest in working on projects that have an international or global perspective, realized through the work of the client organization. This capstone will allow students to learn by doing on projects organized in coordination with the faculty advisor in fall 2012 and continued into the spring 2013 term (a year long capstone, 3 credits plus 1 credit capstone preparation workshop). This capstone may allow or require students to travel in the US or abroad at their own expense. Depending upon project structure, students may begin preliminary capstone work for the client in latter half of 2012. Clients and project teams will be developed before registration for this course. A capstone course is a culminating experience - a course designed to provide opportunities for students to integrate knowledge from their core, concentration, and elective courses, to gain insight into the meanings of professionalism and professional practice, and to reflect on the norms of a discipline or profession. At the Humphrey School, capstones have been designed to give students exposure to the policy process through projects and other assignments with emphases on integrating aspects of research or analysis, policy-making, management, science and technology. Students learn by practicing skills learned in this and other courses, through feedback from clients or partners, and from reflection on their experiences. This course is designed to help students learn in five domains of professional work: Empirical, methodological, theoretical, interpersonal, and ethical. You will gain empirical knowledge and perhaps new facts about the challenges of international and/or institutional development. You will practice different methodologies to produce policy relevant information. The GPA capstone workshop mostly will be self-taught in that students will learn by listening, doing (action), practice and reflection. The professor will provide guidance and serve as an advisor or coach. The client also will provide useful feedback and constructive criticism. Students will be provided some reading materials that may help them with certain tasks. As a team we will review and critique written work and practice presentations. In addition to scheduled class sessions, students will meet independently in teams to discuss work assignments and to collaborate on tasks.
Style: 100% Small Group Activities. Please note that fall 2012 is meant for students to negotiate client agreements (MOA or MOU and scope of work).
Grading: 100% special projects. This is a zero credit course. Grades for this work will be given in spring 2013 at project culmination, PA 8081 capstone in global public policy.
Exam Format: No exam.

PA 8081 Capstone Workshop: Regulating Labor: Case of Occupational Licensing
A-F only, 3 credit(s), max credits 6;
Instructor: Kleiner, Morris M
Description: Students will be working with Senior Staff from the Community Affairs and the Public Policy department of the Federal Reserve Bank of Minneapolis on key regulatory issues facing this major national and regional institution.

PA 8081 Capstone Workshop: Political Advocacy in the Public Interest
A-F only, 3 credit(s), max credits 6;
Instructor: Fox, Jeannie
Description:

PA 8201 Environment and Infrastructure Planning
A-F only, 4 credit(s);
Instructor: Pitt, David George
Description: Relationship between infrastructure, human settlement, and design. Natural resource systems as foundation of infrastructure provision. Environmental basis of, and political/legal/institutional frameworks for, land-use planning. Parallel computer lab, practicum assignment.

PA 8203 Neighborhood Revitalization Strategies and Theories
A-F only, 4 credit(s);
Instructor: Hollister, David
Description: This course focuses on the planning issues surrounding the revitalization of urban neighborhoods in the United States. More specifically, it deals with "place-based" programs of community development (CD) that combine physical development, social service provision, and community organizing. The course begins with an assessment of current thinking about poverty in urban areas and the decline of central city neighborhoods. We will consider frameworks for understanding urban neighborhoods as well as the concept of social capital and how it applies to CD efforts, and the role it plays in current CD policymaking. We will examine various
elements of community development, including social policy and the roles in neighborhood revitalization of housing, small businesses, city governments, neighborhood associations, advocacy organizations, social services, workforce development programs, schools, religious institutions, financial institutions, community crime prevention, historic preservation, the arts, and so on. The course also covers the activities of community development corporations (CDCs), non-profit organizations that provide both physical and social development services to central city neighborhoods.

**PA 8390 Advanced Topics in Advanced Policy Analysis Methods: Research Methods in Public Policy**
2 credit(s), max credits 6;  
Instructor: Kleiner, Morris M  
Description: Syllabus will be updated. Some of the readings and topics are likely to change.

**PA 8790 Advanced Topics in Science, Technology, and Environmental Policy: Nanotechnology, Law, and Society**
3 credit(s), max credits 6;  
Instructor: Fatehi, Leili  
Description: This course will take an interdisciplinary approach to examining the legal, public policy, social, economic, and ethical implications of nanotechnology. The course will explore the need to develop public policies for nanotechnology from the perspective of different stakeholders (federal agencies, the public, industry, the environment, international organizations, etc.) and examine and contrast different statutory objectives and regulatory strategies. The course will also draw on a diverse set of guest speakers and readings and will expose students to different types of policy problems. Students will explore different research methodologies used in the various disciplines that study ethical, legal, and social issues. Because nanotechnology is also a uniquely interdisciplinary field, requiring collaboration between scientists and engineers in virtually all the science disciplines, as well as social scientists, ethicists, lawyers, and policy analysts, enrollment by students with a broad range of interests is encouraged.

**PA 8821 National Security Policy**
3 credit(s);  
Instructor: Andreasen, Steven Peter  
Description: Politics and economics of national security policy. Defense policy, military strategy, and weapons procurement. While emphasis is on the United States, other countries also discussed.

**PA 8921 Master's: Professional Paper (Individual Option)**
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Bryson, John M  
Description: Student may contact the instructor or department for information.

**PA 8921 Master's: Professional Paper (Individual Option)**
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Kudrle, Robert T  
Description: Student may contact the instructor or department for information.

**PA 8921 Master's: Professional Paper (Individual Option)**
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Allen, Ryan Patrick  
Description: Student may contact the instructor or department for information.

**PA 8921 Master's: Professional Paper (Individual Option)**
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Quick, Kathy  
Description: Student may contact the instructor or department for information.

**PA 8921 Master's: Professional Paper (Individual Option)**
1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Ron, James  
Description: Student may contact the instructor or department for information.

**PA 8991 Independent Study**
0.5-3 credit(s), max credits 6, 6 completions allowed;  
Instructor: Bielefeld, Wolfgang Hor  
Description: Student may contact the instructor or department for information.
PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Bloomberg PhD,Laura L
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Kuzma,Jennifer
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Friedemann-Sanchez,Greta
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Bolan,Richard Stuart
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Stone,Melissa M
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Jacobs,Larry
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Fennelly,Katherine
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Bryson,John M
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Myers Jr, Samuel L
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Boyte,Harry C
Description: None.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Crosby,Barbara C
Description: Student may contact the instructor or department for information.
Instructor: Levison, Deborah
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Goetz, Edward Glenn
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Kleiner, Morris M
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Bruininks, Robert Henry
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Stone, Paul Clois
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Munnich Jr, Lee William
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Kudrle, Robert T
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Assaad, Ragui A
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Hanratty, Maria J
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Cao, Jason
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Sandfort, Jodi R.
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Kiedrowski, P. Jay
Description: Student may contact the instructor or department for information.
PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Slotterback, Carissa Schively
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Wilson, Elizabeth Joan
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Kelley, Steve
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Zhao, Zhirong Jerry
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Soss, Joe
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Allen, Ryan Patrick
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Fan, Yingling
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Lindsey, Greg H
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Gray, Sherry
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Cohen, Dara Kay
Description: Student may contact the instructor or department for information.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Quick, Kathy
Description: Student may contact the instructor or department for information.
PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Schwartz,Eric Paul
Description: Student may contact the instructor or department for information.

Public Health  A-302 Mayo (Box 197)

PubH 1001 Success Over Stress (SOS)
1 credit(s);
Instructor: Keene,Sarah
Description: Success Over Stress (SOS) is an introductory level course designed to provide students with the knowledge and tools they need to recognize and manage stress while in college - and beyond. It covers basic concepts in stress prevention and mitigation while empowering students to choose from a variety of techniques that promote self-awareness and reflection, goal setting, and action toward healthy stress management. The course uses stories, scenarios and information pertinent to all students. It emphasizes prevention strategies and proactive decision-making. It presents students with tips about how to navigate college life and be successful, including time management, building a support system, effective communication and recognizing unhealthy coping techniques. Students are encouraged to think about how the course topics apply to their own lives. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/index.html. Students should contact SOSStress@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts. SOS is offered through the Rothenberger Institute. RI provides a suite of wellness-based courses focusing on the knowledge and skills students need to lead healthy, productive, and balanced lives.
Grading: 50% quizzes, 50% written homework.

PubH 1003 Alcohol and College Life
OPT No Aud, 1 credit(s);
Instructor: Lucachick,Laurie Ann
Description: Alcohol and College Life (ACL) provides college students with factual information about how alcohol and other drugs affect college life. The course highlights stories and information pertinent to all students, regardless of whether or not they choose to drink. It supports students who do not drink, reinforces safety skills among students who do drink, and counters dangerous myths and behaviors. It emphasizes personal prevention strategies and responsible decision-making. It presents students with tips about how to navigate college life and be successful, including time management, getting involved on campus, meeting new people, etc. Students are encouraged to think about how the course topics apply to their own lives. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/index.html. Students should contact ACLife@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts. ACL is offered through the Rothenberger Institute. RI provides a suite of wellness-based courses focusing on the knowledge and skills students need to lead healthy, productive, and balanced lives. For more information, visit www.ri.umn.edu.
Grading: 45% quizzes, 55% written homework.

PubH 1005 Sleep, Eat, and Exercise
1 credit(s);
Instructor: STAFF
Description: Sleep, Eat &
Exercise (SEE) is an introductory level course designed to provide students with the knowledge and skills they need to live a balanced life in college and beyond. It covers basic concepts in nutrition, sleep, and physical activity and incorporates a variety of techniques to promote self-awareness and reflection, goal setting, and action toward wellness.

SEE is intended for undergraduate students who want a basic knowledge of one or more of the main topic areas, want help achieving/maintaining a healthy lifestyle, and/or want experience taking an online course. It is entirely web-based. Students must have access to a computer and the Internet and should have basic computing skills. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/index.html.

Students should email SEE@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts.

SEE is offered through the Rothenberger Institute. RI provides a suite of wellness-based courses focusing on the knowledge and skills students need to lead healthy, productive, and balanced lives. For more information, visit www.ri.umn.edu.

PubH 2561 Public Health: A Global Perspective
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Sage PhD, Starr Kelly
Description: Student may contact the instructor or department for information.

PubH 3001 Personal and Community Health
2 credit(s);
Instructor: Farley, Dana Mark
Description: Introduction to scientific, socio-cultural, and attitudinal aspects of communicable and degenerative diseases, environmental and occupational health hazards, alcohol and drug problems; emphasis on role of education in health conservation, disease control, and drug use. The full syllabus for the course, including lecture outlines, textbook and exam information, can be found at the course URL listed below.
Style: 100% Lecture.
Grading: 40% final exam, 10% reports/papers, 25% other evaluation. on each of two mid-term exams
Exam Format: Multiple choice, fill-in-the-blank, short answer

PubH 3003 Fundamentals of Alcohol and Drug Abuse
2 credit(s); Credit will not be granted if credit has been received for: PUBH 3004;
Instructor: Farley, Dana Mark
Description: Lecture and special readings on the scientific, sociocultural and attitudinal aspects of alcohol and other drug problems, with special emphasis on incidence, prevalence, high risk populations, prevention, and interventions. The full syllabus for the course, including lecture outlines, textbook and exam information, can be found at <a href="http://www.epi.umn.edu/academic/syllabi.shtm">http://www.epi.umn.edu/academic/syllabi.shtm</a>.
Style: 100% Lecture.
Grading: 40% final exam, 10% reports/papers, 50% other evaluation. two mid-term exams (25% each)
Exam Format: Multiple choice

PubH 3004 Basic Concepts in Personal and Community Health
4 credit(s); Credit will not be granted if credit has been received for: 3001 Credit will not be granted if credit has been received for: PUBH 3003;
Instructor: Farley, Dana Mark
Description: Introduction to scientific, socio-cultural, and attitudinal aspects of communicable and degenerative diseases. This course includes environmental and occupational health hazards and alcohol and drug problems, with an emphasis on the roles of education and prevention.
Style: 100% Lecture.
Grading: 40% final exam, 10% reports/papers, 50% other evaluation. four midsemester exams (12.5% each)
Exam Format: Multiple choice, short answer

PubH 3005 Fundamentals of Alcohol and Drug Abuse for Teacher Education
1 credit(s); Undergrad in agricultural educ or business/marketing educ or career/technical educ or foundations of educ or [kinesiology, pre-PE] or technology educ or music educ Credit will not be granted if credit has been received for: PUBH 3003;
PubH 3010 Public Health Approaches to HIV/AIDS
2 credit(s); Credit will not be granted if credit has been received for: PUBH 6010;
Instructor: Rybicki MPH, Sarah Louise
Description: The purpose of this undergraduate level course is to learn more about HIV/AIDS, with an emphasis on: Preventing HIV infection in those who are uninfected; Preventing development of HIV disease in those who are HIV-infected; Preventing morbidity and mortality in those with HIV disease. A significant focus of this course will be on community responses to HIV/AIDS in Minnesota, including medical, social service, and political. This focus acknowledges the unique role of the community in structuring our response to HIV/AIDS historically and today. Learning objectives for this course include: The pathogenesis and natural history of HIV infection and disease; The epidemiology (local, national and international) of HIV/AIDS; Modes of HIV transmission, including sexual, blood-borne (including via injection drug use) and mother-to-child; Strategies to prevent HIV infection including: education, peer counseling, community outreach, behavior change, STD treatment, condoms, microbicides, harm education, blood screening and prevention of maternal-child transmission; Strategies to prevent HIV disease, including: counseling and testing, community screening, use of antiretroviral therapy, prophylaxis of opportunistic infections, and diagnosis of co-morbidities including tuberculosis and hepatitis C; Strategies to prevent morbidity and mortality, including treatment of HIV disease, and palliative care, including HIV care in resource-limited settings.
Style: 80% Lecture, 20% Discussion.
Grading: 30% mid exam, 40% final exam, 20% reports/papers, 10% class participation.
Exam Format: essay, take-home

PubH 3040 Dying and Death in Contemporary Society: Implications for Intervention
2 credit(s); Jr or sr or instr consent Credit will not be granted if credit has been received for: PUBH 6040;
Instructor: Koski, Ellen Haberman
Description: Student may contact the instructor or department for information.

PubH 3050 Practicum in Peer Education I
A-F only, 2 credit(s);
Instructor: Sanem, Julia R
Description: Student may contact the instructor or department for information.

PubH 3102 Issues in Environmental and Occupational Health
3 credit(s); Credit will not be granted if credit has been received for: PUBH 6102;
Instructor: Nachreiner, Nancy Martha
Description: Student may contact the instructor or department for information.

PubH 3104 Environmental Health Effects: Introduction to Toxicology
2 credit(s); Basic science coursework; undergrad coursework in [biology, chemistry, biochemistry] recommended Credit will not be granted if credit has been received for: PUBH 6104;
Instructor: Wattenberg, Elizabeth Vaughn
Description: This course is designed for students who are interested in public health, environmental issues, and the environmental bases of human disease. The primary focus is on examining how chemical, biological, and physical agents affect biological systems. This course covers the basic principles of toxicology. This includes dose-response relationships, safety evaluation and risk assessment; and absorption, distribution, metabolism and excretion of toxicants.

**PubH 3106 Making Sense of Health Studies**
2 credit(s);
Instructor: Maldonado, George
Description: We spend large sums of money on health (epidemiologic) research. Results of that research reach the public primarily in the form of brief reports via television news, television commercials, newspapers, magazines, books and internet websites. These brief reports should not be read uncritically. This course will teach you how to critically evaluate health news (and the health research reports on which they are based) to make good, well-informed decisions about your health and well-being. In addition, this course will teach you how to conduct your own personal (N-of-1) studies to find out what health strategies work for you (for example, what weight-loss tips work best for you personally).
All of this will be done in the context of recent news reports that are of interest to college students.
This is a self-contained class with no prerequisites. No previous background in math or statistics is needed.
This course is taught by scientists who are experts in the methods of epidemiology, who have published extensively in the scientific literature on the methods of epidemiology, and who have been teaching this topic for many years.
This course satisfies a core-course requirement for the Public Health minor.

Style: 90% Lecture, 10% Film/Video.
Grading: 50% mid exam, 50% final exam.

**PubH 3107 Global Public Health and the Environment**
A-F only, 2 credit(s);
Instructor: Alexander, Bruce H
Description: Student may contact the instructor or department for information.

**PubH 3202 What is Public Health?**
OPT No Aud, 2 credit(s);
Instructor: Ehrenberg, Anne
Description: The online course will provide a broad overview of the public health system - what it is, its origins and evolution and how it is structured and administered at the federal, state and local levels in the United States. In addition it will provide a broad framework for understanding the mission, key concepts, principles and practices of population-based public health practice. Through the use of case studies, students will have an opportunity to see how the concepts may be applied. This course will not substitute for PubH 3001/3004.
Grading: 20% final exam, 50% reports/papers, 20% class participation, 10% other evaluation. critique of fellow student's paper
Exam Format: multiple choice

**PubH 3315 Clinical Research from Lab to Bedside to Populations**
A-F only, 2 credit(s);
Instructor: Luepker MD, Russell V
Description: Course Description This course is intended to provide a basic understanding of health research in humans. It describes research methods, contemporary topics, controversies and health careers in the field. The course includes perspectives from dentistry, medicine, nursing, pharmacy and public health. It is intended for students considering a health career. Course Goals and Objectives A. An understanding of research methods for health studies in individuals and populations. B. An understanding of the controversial questions in human health through specific examples and the different approaches to answering these questions through clinical research. C. A recognition of potential careers in health research.
Style: 80% Lecture, 10% Discussion, 10% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 60% written homework.

**PubH 3905 Nutrition for Public Health Promotion and Disease Prevention**
2 credit(s); Jr or sr or instr consent Credit will not be granted if credit has been received for: PUBH 6905;
Instructor: Laska, Melissa Nelson
Description: This course covers nutrition topics of contemporary interest. Key concepts about public health nutrition are discussed in relation to both personal and community nutrition problems and concerns. This is an applied introductory course with labs.
Style: 30% Lecture, 15% Discussion, 40% Laboratory, 15% Guest Speakers. The course is structured as a weekly seminar with about an hour of lecture and an hour of lab work and small group activities. Discussion topics will be integrated throughout the course.
Grading: 30% mid exam, 30% final exam, 25% special projects, 15% laboratory evaluation.
PubH 3940 Concepts and Controversies in Public Health Nutrition and Health Promotion
1 credit(s);
Instructor: Laska, Melissa Nelson
Description: The overall goal of this course is to introduce upper-level undergraduate students to the most current societal issues around public health nutrition and health promotion. This course will introduce students to on-going cutting-edge research in the field, much of which has originated from the University of Minnesota, and will help students to engage in critical thinking about these issues, as well as constructive dialogue with their peers. The course will be structured upon the use of a socioecological framework, examining multiple levels of influence on dietary intake, food choices and related health outcomes; for example, these levels include a variety of environmental settings, such as homes/households, schools, neighborhoods and communities. The course will address major public policy initiatives related to public health nutrition, health promotion and disease prevention. Finally, the course will provide introduce students to career opportunities and future training in public health, particularly those that relate to public health nutrition. This course does not have an assigned textbook. Instead, each week students will have required readings that will be available on the WebVista course website. Additional course materials, such as the syllabus, lecture slides, and optional readings will also be available on the website for students.
Style: 75% Lecture, 25% Discussion.
Grading: We expect that 35% of grade will be based on online postings about the course content, 30% will be based on brief in-class quizzes, class participation and attendance, and 35% will be based on a final assignment/paper.

PubH 4561 Introduction to Epidemiology: Research and Data Exploration
A-F only, 3 credit(s);
Instructor: Sage PhD, Starr Kelly
Description: Student may contact the instructor or department for information.

PubH 6003 Fundamentals of Alcohol and Drug Abuse for Teacher Education
1 credit(s); Master of education student or instr consent Credit will not be granted if credit has been received for: PUBH 3003;
Instructor: Matson, Emily Ann
Description: PubH 6003 is a course designed to meet the legislative requirement for teacher licensure in the state of Minnesota. This course is completely online, but is not an independent study course. Interactions are asynchronous. However, there are set due dates for discussion postings and assignments. The course consists of 13 lessons and their respective interactive and audio units on the scientific, socio-cultural, and attitudinal aspects of alcohol and other drug abuse problems. Special emphasis is placed on identifying resources related to incidence and prevalence of substance use and abuse, role of chemical use on development, prevention issues and interventions, including an emphasis on high-risk populations. Prerequisites: M.Ed. student or Addiction Studies student. All other students should consult with the instructor, Emily Matson (mats0166@umn.edu), for a permission number. Credit will not be granted if credit has been received for: PubH 3002, 3003, 3004, 3005, 3032, 3033, 5003, or 5023. Students must have access to a computer and the Internet and should have basic computing skills. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/onlinelearningassessment.html. All class communications will be sent to students' official U of M email accounts only. Students should check their U of M email account frequently throughout the semester as that is how the students, the instructor, and the TA will communicate. Questions should be sent to pubh3005@umn.edu. Students may access the course website after 1:00am on the first day of the semester. Going through the lessons and completing the readings, assignments and quizzes will require approximately 45 hours of effort throughout the term. Style: 100% Web Based. Students access all lessons and readings via the Moodle course site. Going through the lessons and completing the readings, assignments and quizzes will require approximately 45 hours of effort throughout the term.
Grading: 27.5% Application Paper, 30% Written Assignments, 41.5% Discussion Postings, 1% Other Course Work. This is not an independent study course. There are due dates for assignments and discussion postings. Late work will be penalized.

PubH 6010 Public Health Approaches to HIV/AIDS
3 credit(s); Grad student or professional school student or instr consent Credit will not be granted if credit has been received for: PUBH 3010;
Instructor: Rybicki MPH, Sarah Louise
Description: Student may contact the instructor or department for information.

PubH 6020 Fundamentals of Social and Behavioral Science
A-F only, 3 credit(s), max credits 6;
Instructor: Lando, Harry A
Description: Student may contact the instructor or department for information.

PubH 6020 Fundamentals of Social and Behavioral Science
A-F only, 3 credit(s), max credits 6;
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PubH 6035 Applied Research Methods
3 credit(s);
Instructor: Hennrikus, Deborah Jane
Description: The purpose of this course is to teach basic research skills and concepts needed to plan, conduct, and analyze data from a research project. Skills including performing literature searches; questionnaire development; scale construction; item analysis; data coding, entry and analysis; and report writing will be taught. Through the semester, students will develop a research question, devise and implement a brief survey to address that question, analyze their survey data using STATA statistical software, and write a report. Most of the class and lab activities will focus on the steps involved in completing this project. Students will also be given a chance to develop their STATA data management and analysis skills using existing datasets.
Style: 50% Lecture, 5% Discussion, 25% Laboratory, 15% Small Group Activities, 5% Student Presentation.
Grading: 40% reports/papers, 48% written homework, 5% in-class presentation, 7% class participation.

PubH 6050 Community Health Theory and Practice I
3 credit(s);
Instructor: Sherwood, Nancy Eliza
Description: The goal of this course is to provide students with the background knowledge in theory and public health practice to develop, implement, and evaluate intervention programs that will protect or improve the health of populations by creating behavior change in response to multiple levels of influence. Learning Objectives: (1) Provide an overview of the public health approach and the role of community health education. (2) Describe the components of a healthy community. (3) Discuss the importance of community engagement and empowerment in community health education. (4) Explain the importance of ethics in public health practice. (5) Discuss the importance of using conceptual models to plan the implementation and evaluation of interventions. (6) Describe and compare individual, interpersonal, organizational, community, and societal/policy-oriented theories explaining health behavior. (7) Identify the theoretical constructs associated with the major models of health behavior change. (8) Evaluate the strengths and limitations of each model. (9) Create a theory-driven model of the predictive factors of a health behavior. (10) Demonstrate how health behavior change theories may be applied to practical scenarios. Methods of Instruction: (1) Introduction of topic by instructors or guest expert. (2) Class discussion and group work on application scenarios in accordance with topic of session. (3) Assigned readings. (4) Development of conceptual models. (5) Short assignments (summary and critique of theoretically informed interventions). (6) Final paper and presentation, informed by preliminary assignments. (7) Continual feedback on work from other students, teaching assistant, and instructors.

PubH 6066 Building Communities, Increasing Health: Preparing for Community Health Work
2 credit(s);
Instructor: Axtell, Sara Ann
Description: The purpose of the course is to prepare you to make a contribution to the health of your own communities, as well as other communities, using asset-oriented, collaborative approaches. The course has three overarching themes that will help to prepare you for community work: cultural self-study, community building/community organizing, and working across culture. Course Goals and Objectives 1. Provide experience in living with ambiguity, and multiple "correct" answers or ways of thinking. 2. Understand that concepts like health, community, and development have a culturally determined definition and connotation. Describe applications of that understanding to community-based public health work. 3. Describe the role of public health workers in community organizing and community building. 4. Understand the effects of the historical relationships between cultural groups on intercultural interfacing. 5. Discuss the difference between asset-based and deficit-based approaches to community health. 6. Discuss potential barriers in community building and organizing, and how to overcome them. 7. Identify approaches communities take to solving problems. 8. Identify a range of public health issues lending themselves to community organizing/building approaches. 9. Develop a better understanding of yourself and your own community(ies). 10. Identify cultural self-study questions to walk with over time.

PubH 6078 Public Health Policy as a Prevention Strategy
2 credit(s);
Instructor: Toomey, Traci Louise
Description: Student may contact the instructor or department for information.

PubH 6100 Topics: Environmental Health: Occupational Environmental Health Nursing Seminar
0.5-4 credit(s), max credits 80, 20 completions allowed;
Instructor: McGovern, Patricia Marie
Description: Student may contact the instructor or department for information.

PubH 6101 Environmental Health
PubH 6131 Working in Global Health
A-F only, 2 credit(s);
Instructor: Toscano Jr, William A
Description: This course explores the interaction between the environment and humans. The envirome covers all aspects of the environment including physical, psychosocial, nutritional and chemical environment. How he environment affects human health is discussed. Principles of environmental health relating to macro and micro environments and products consumed or used by people. Global climate change and its effects on human health are discussed.
Style: 50% Lecture, 10% Small Group Activities, 30% Student Presentation, 10% Guest Speakers.
Grading: 50% reports/papers, 10% attendance, 25% in-class presentation, 15% class participation.

PubH 6103 Exposure to Environmental Hazards
A-F only, 2 credit(s);
Instructor: Raynor, Peter Cameron
Description: People come into contact with many potentially hazardous chemical, biological, and physical agents in the home, work, and outdoor environments. Exposure is a quantitative measure of the contact between a person and a potentially hazardous agent. In this course, students will learn how to recognize potential exposures in a variety of settings and how to evaluate those exposures. Class sessions will be in a traditional lecture format. Course grades will be based on written responses to the readings assigned for each class session, homework assignments, and an individual poster project on human exposure to one of a variety of agents of interest.

PubH 6104 Environmental Health Effects: Introduction to Toxicology
A-F only, 2 credit(s); Basic science coursework; undergrad coursework in [biology, chemistry, biochemistry] recommended
Credit will not be granted if credit has been received for: PUBH 3104;
Instructor: Wattenberg, Elizabeth Vaughn
Description: This course is designed for students who are interested in public health, environmental issues, and the environmental bases of human disease. The primary focus is on examining how chemical, biological, and physical agents affect biological systems. This course covers the basic principles of toxicology. This includes dose-response relationships, safety evaluation and risk assessment; and absorption, distribution, metabolism and excretion of toxicants.

PubH 6115 Worker Protection Law
1 credit(s);
Instructor: Austin, Michael L
Description: How do we protect workers? We will focus on the role of government in protecting rights of citizens. Labor movement history will serve as a starting point for a discussion of modern systems for protecting workers from unsafe work places and compensating them for injuries that do occur. Law will be reviewed that protects individuals against class based discrimination and creates a "right" to work. II. Learning Objectives At the end of this course, students should be able to: *Discuss the history of worker protection law *Describe the role of government in protecting the safety and well being of citizens *Discuss legal issues underlying several worker protection policies *Discuss the legal basis for compensation for injuries to health and property, and its application to worker protection *Demonstrate techniques of persuasive legal research, writing and oral presentation III. Methods of Instruction and Work Expectations Students are encouraged to introduce issues of current interest from the media or from their workplace for discussion. These issues will be incorporated into the curriculum when appropriate. Through lecture and discussion, we will review public law that focuses on the role of government in protecting the safety and well being of citizens. Review of labor movement history will serve as a starting point for a discussion of modern systems for protecting workers from unsafe work places and compensating them for injuries that occur. In addition, we will review law that protects individuals against class based discrimination and creates a "right" to work. Each week students will write a short paragraph or one page outline that answers a question based on the reading assignment. Each student will conduct legal research and write five pages on the legal aspects of an environmental or public health problem. A rough draft must be submitted for review with the instructor before a final draft is submitted. The paper must advocate a public policy that might solve the problem, and include at least 10 primary references. Each student will prepare and present a 6-8 minute persuasive speech in class based on the legal research and writing project. Students will critique each other. Students will work in groups and prepare a classroom presentation regarding a public policy issue. Groups will research issues, identify stakeholders and advocate solutions. Presentations will be made from the perspectives of the various stakeholders. An outline of research materials with at least 10 primary references must be submitted.
Style: 70% Lecture, 25% Discussion, 5% Student Presentation.
Grading: 50% reports/papers, 30% written homework, 20% in-class presentation.

PubH 6131 Working in Global Health
2 credit(s);
Instructor: LaFrance, Amy Becker
Description: PUBH 6131 is a skills-based course that focuses on preparing students to work on global public health projects. Topics include budgeting, program development, decision-making, risk management, cross-cultural communication, community engagement,
leadership and resilience. Course discussion and assignments will emphasize applied skills.

**PubH 6132 Air, Water, and Health**  
A-F only, 2 credit(s);  
Instructor: Simcik, Matt  
**Description:** Student may contact the instructor or department for information.

**PubH 6164 Toxicological Analysis**  
A-F only, 2 credit(s);  
Instructor: Peterson, Lisa Ann  
**Description:** Student may contact the instructor or department for information.

**PubH 6170 Introduction to Occupational Health and Safety**  
3 credit(s); Environmental health major or instr consent  
Credit will not be granted if credit has been received for: NURS 5170;  
Instructor: Nachreiner, Nancy Martha  
**Description:** Introduction to major concepts and issues in occupational health and safety, including hazard identification, assessment and control. Recognition of major hazard categories including physical, chemical, biological, ergonomic, and psycho-social. All students attend a site-visit to a local manufacturing facility.

**PubH 6176 Hazardous Materials and Waste Management**  
2 credit(s);  
Instructor: Brosseau, Lisa M  
**Description:** This course is concerned with the management of hazardous materials and wastes. Through lectures, case studies, workshops and field trips we will consider the generation, control, and disposal of hazardous materials and wastes. Students will develop knowledge and skills needed to recognize, evaluate, control and prevent hazards from chemicals that threaten occupational and environmental health.  
**Style:** 40% Lecture, 10% Discussion, 30% Small Group Activities, 10% Student Presentation, 5% Field Trips, 5% Guest Speakers.  
**Grading:** 20% midterm exam, 20% special projects, 60% quizzes.  
**Exam Format:** Midterm exam: Take-home Final Problem Set includes final class presentation 4 Problem Sets (take-home)

**PubH 6181 Surveillance of Foodborne Diseases and Food Safety Hazards**  
2 credit(s); 6320 or 6330 or 6341 or instr consent  
Credit will not be granted if credit has been received for: VMED 5165;  
Instructor: Hedberg, Craig W  
**Description:** Student may contact the instructor or department for information.

**PubH 6190 Environmental Chemistry**  
3 credit(s);  
Instructor: Simcik, Matt  
**Description:** Student may contact the instructor or department for information.

**PubH 6193 Advanced Topics in Human Exposure Science**  
A-F only, 2 credit(s);  
Instructor: Ramachandran, Gurumurthy  
**Description:** Student may contact the instructor or department for information.

**PubH 6200 Topics: Foundations of Interprofessional Communication and Collaboration**  
S-N only, 0.5-4 credit(s), max credits 80, 20 completions allowed;  
Instructor: Todd, Tricia  
**Description:** Student may contact the instructor or department for information.

**PubH 6301 Fundamentals of Clinical Research**  
3 credit(s); Clinical Research major or instr consent  
Credit will not be granted if credit has been received for: PUBH 6305;  
Instructor: Lakshminarayan, Kamakshi  
**Description:** This course is intended to provide a foundation for the more advanced study that is necessary to become an accomplished clinical research investigator. This course will review the concepts that underlie successful clinical research design, implementation, and reporting. This course will also expose students to the resources and opportunities available to support clinical research at the academic health center.  
**Style:** 30% Lecture, 30% Discussion, 40% Guest Speakers.
**Grading:** 20% mid exam, 30% final exam, 50% written homework.

**PubH 6320 Fundamentals of Epidemiology**  
A-F only, 3 credit(s);  
**Instructor:** Punyko,Judy  
**Description:** Student may contact the instructor or department for information.

**PubH 6320 Fundamentals of Epidemiology**  
A-F only, 3 credit(s);  
**Instructor:** Lazovich,DeAnn  
**Description:** Student may contact the instructor or department for information.

**PubH 6325 Data Processing with PC-SAS**  
1 credit(s);  
**Instructor:** Oakes,Michael  
**Description:** The aim of this course is to introduce School of Public Health (SPH) students to methods for processing existing data sources in SAS. This time-intensive short course emphasizes hands-on and otherwise practical approaches to prestatistical data processing and analysis with PC-SAS statistical software on an PC with a MS Windows operating system. The course is basic and introductory. The intended audience is public health masters and doctoral students but others are welcome.

**PubH 6333 Principles of Human Behavior I**  
A-F only, 2 credit(s);  
**Instructor:** Nelson,Toben F  
**Description:** Student may contact the instructor or department for information.

**PubH 6341 Epidemiologic Methods I**  
A-F only, 3 credit(s), max credits 6;  
**Instructor:** Harlow,Bernard Leslie  
**Description:** Student may contact the instructor or department for information.

**PubH 6341 Epidemiologic Methods I**  
A-F only, 3 credit(s), max credits 6;  
**Instructor:** Kulasingam,Shalini L  
**Description:** Description: Epidemiologic Methods I is a combination of a subject matter science and research methodology. Epidemiologic Methods I focuses on the latter component. The course introduces the study designs applied to human populations, including randomized trials and four types of observational studies (cohort, case-control, cross-sectional, ecological). Because cause-and-effect relations are at the heart of epidemiologic research, numerous related topics are taught in Epidemiologic Methods I including causal inference, bias, and effect modification.  
**Style:** 70% Lecture, 20% Discussion, 10% Small Group Activities.  
**Grading:** 48% mid exam, 28% final exam, 24% written homework. 8 homework assignments (3 pts ea) Exam 1 (24%): First 1/3 the course Exam 2 (24%): Cumulative with emphasis on material covered in middle 1/3 Exam 3 (28%): Cumulative with emphasis on material covered in final 1

**PubH 6343 Epidemiologic Methods III**  
4 credit(s);  
**Instructor:** Schreiner,Pamela Jean  
**Description:** Epidemiologic Methods III provides instruction in the analysis and interpretation of data from various epidemiological study designs. SAS is used to demonstrate epidemiological and statistical concepts in data analysis. The course is required for all M.P.H. students in Epidemiology. Prerequisites include PubH 6342 (Epidemiologic Methods II) and PubH 6452 (Biostatistics II). Permission of the instructor is needed for substitutions or exemptions. Upon completion of this course, students will be able to: 1) Describe the research hypotheses that are appropriate for cross-sectional studies, case-control studies, and cohort studies; 2) Describe the rationale underlying the major techniques used to analyze data from epidemiological studies; 3) Know how to interpret data from various analyses of epidemiological data; 4) Explain how interactions, confounders and dose-response relations among variables are examined; and 5) Understand basic SAS procedures to analyze data from epidemiological studies. Note that there is no programming required for this course. A companion SAS laboratory course is required for MPH students majoring in Epidemiology, where the focus is hands-on data analysis. For PubH 6343, interpretation of the statistics shown on data printouts is emphasized.  
**Style:** 100% Lecture.  
**Grading:** 50% mid exam, 30% final exam, 20% written homework. Exams are similar in content and structure to homework assignments and in-class exercises.
Exam Format: In-class exams with formulae provided.

PubH 6348 Writing Research Grants
A-F only, 2 credit(s);
Instructor: Pereira PhD, Mark A
Description: Student may contact the instructor or department for information.

PubH 6348 Writing Research Grants
A-F only, 2 credit(s);
Instructor: Luepker MD, Russell V
Description: This course provides instruction and hands-on experience in the preparation of a NIH grant application. This course is required for all PhD students in Epidemiology as preparation for the written preliminary exam. It is also required for the Clinical Research MS Program.
Style: 60% Lecture, 5% Film/Video, 10% Discussion, 15% Student Presentation, 10% Guest Speakers.
Grading: 40% reports/papers, 25% written homework, 25% in-class presentation, 10% class participation. No Exams

PubH 6350 Epidemiologic Methods III: Lab
1 credit(s);
Instructor: Pankow, James Scott
Description: Student may contact the instructor or department for information.

PubH 6350 Epidemiologic Methods III: Lab
1 credit(s);
Instructor: Schreiner, Pamela Jean
Description: Student may contact the instructor or department for information.

PubH 6355 Pathophysiology of Human Disease
4 credit(s);
Instructor: Oberg MD, Charles N
Description: This course presents a compendium of human diseases relevant to the public health professional. The material will be presented from an epidemiologic perspective that focuses on disease prevalence, incidence, morbidity and mortality, risk factors, and prevention strategies. It will emphasize mechanisms of development (pathogenesis), and progression, pathophysiologic associations with risk factors, structural alterations (morphologic changes) resulting from the disease, and the functional consequences of these structural changes (clinical significance).
Style: 75% Lecture, 25% Laboratory.
Grading: 20% reports/papers, 80% quizzes.

PubH 6365 Epidemiology of Global Health
2 credit(s);
Instructor: Lifson, Alan Raymond
Description: Student may contact the instructor or department for information.

PubH 6381 Genetics in Public Health
2 credit(s);
Instructor: Demerath, Ellen Wrchota
Description: This course will provide an introduction to public health genetics. Topics will include an overview of human genetic and genomic variation, genetic epidemiology (study designs and methods used in gene discovery and gene characterization), gene-environment interaction, epigenetics, genetic testing in public health, and the ethical, social, and legal implications of genetic testing and genomic research. Diseases of primary focus will include cancers, obesity, diabetes, and cardiovascular disease, but will also include coverage of other diseases of interest to the class. A collaborative learning environment is encouraged, in which the students as well as the instructor actively contribute their experience and knowledge to the class.
Style: 50% Lecture, 10% Discussion, 20% Student Presentation, 20% Guest Speakers.
Grading: 25% mid exam, 25% reports/papers, 5% quizzes, 10% attendance, 25% in-class presentation, 10% class participation.

PubH 6386 Public Health Aspects of Cardiovascular Disease
2 credit(s);
Instructor: Folsom, Aaron R
Description: This course covers the epidemiology and prevention of cardiovascular disease (CVD). Focus is on epidemiological
methods related to CVD, established and novel risk factors, national data sources, approaches to and national recommendations for CVD prevention. Controversies in CVD epidemiology and prevention are covered. The course is designed for epidemiology majors and those in related health fields. Basic epidemiology and statistics courses are pre-requisites. Learning objectives are 1) to understand the descriptive epidemiology of CVD and CVD risk factors, (2) to be able to interpret CVD epidemiologic data, (3) to become familiar with methods used in this field, and (4) to understand individual and population approaches to CVD prevention.

**Style:** 75% Lecture, 15% Discussion, 3% Small Group Activities, 6% Guest Speakers, 1% Web Based. Discussion includes critiquing articles

**Grading:** 10% mid exam, 40% final exam, 45% written homework, 5% in-class presentation.

**Exam Format:** Exams usually are take-home essay writing.

**PubH 6389 Nutritional Epidemiology**

2 credit(s);
Instructor: Harnack,Lisa Joan

**Description:** The course is designed to provide the student with familiarity with the design, conduct, analysis, and interpretation of epidemiologic studies related to nutrition. At the conclusion of this course students will be able to: 1.) Select the most appropriate dietary intake assessment method for a given research question, epidemiologic study design, and study population; 2.) Identify the strengths and limitations of each dietary intake assessment methodology currently available, and understand the implications of the limitations of each method on study results; 3.) Select the most appropriate epidemiologic study designs for various nutrition-related research questions by taking into account the strengths and limitations of various designs in relation to specific nutrition research questions; and 4.) Describe the data analysis and interpretation issues of special importance in nutritional epidemiology studies.

**Style:** 75% Lecture, 10% Discussion, 15% Small Group Activities.

**Grading:** 40% final exam, 20% special projects, 40% written homework.

**Exam Format:** Take home open book exam

**PubH 6414 Biostatistical Methods I**

A-F only, 3 credit(s);[Public hlth [MPH or certificate] student or environmental hlth [MS or PhD]] or instr consent Credit will not be granted if credit has been received for: PUBH 6450;
Instructor: Brearley,Ann M.

**Description:**

**PubH 6420 Introduction to SAS Programming**

1 credit(s);
Instructor: Grandits,Gregory Alan

**Description:** This class is an introduction to the use of the SAS programming language for the analysis of biomedical data. After an introduction to the SAS environment on a PC, SAS will be used to write programs for reading and processing data, and for performing descriptive and basic statistical analyses. By the end of the course, students should be able to write SAS programs for data management, presentation, and analyses. - Run SAS programs on a PC. - Read raw input files in various formats and create SAS datasets. - Create new variables from other data. - Use basic SAS procedures to describe data numerically and graphically. - Annotate SAS output with informative titles, labels, and formats. - Work with SAS datasets: sort, subset, merge, and re-format SAS datasets - Use SAS procedures for basic statistical inference: Chi-square tests, T-Tests, ANOVA, Regression, etc. - Export SAS data and output to other computers and software

**Grading:** 20% mid exam, 20% final exam, 60% written homework.

**PubH 6450 Biostatistics I**

A-F only, 4 credit(s);[College-level algebra, health sciences grad student] or instr consent Credit will not be granted if credit has been received for: PUBH 6414;
Instructor: Mugglin,Andrew Scott

**Description:**

**PubH 6470 SAS Procedures and Data Anaysis**

3 credit(s);
Instructor: Thomas,William

**Description:** PubH 6470 introduces students with a background in statistics to programming, graphics, and data analysis using SAS.
The course concentrates on nuts-and-bolts programming using PC-SAS, data editing and reformatting, as well as statistical applications. Applications will include: general linear models, nonparametric smoothing, logistic regression, proportional hazards regression, plus bootstrap methods, and methods for repeated measurements of continuous and categorical outcomes. Class content may vary depending on student requests. Homework exercises involve both data cleaning and data analysis.

**Style:** 100% Lecture.

**Grading:** 30% mid exam, 30% final exam, 40% written homework.

### PubH 6541 Statistics for Health Management Decision Making
- **Credit(s):** 3
- **Instructor:** Abraham, Jean Marie
- **Description:** Student may contact the instructor or department for information.

### PubH 6542 Management of Health Care Organizations
- **Type:** A-F
- **Credit(s):** 3
- **Instructor:** Begun, James Warren
- **Description:** Student may contact the instructor or department for information.

### PubH 6547 Health Care Human Resources Management
- **Type:** A-F
- **Credit(s):** 2
- **Instructor:** Preston, Jennifer McKinnon
- **Description:** Student may contact the instructor or department for information.

### PubH 6548 Health and Health Systems
- **Type:** A-F
- **Credit(s):** 2-3
- **Instructor:** Christianson, Jon B
- **Description:** The course provides an overview of the U.S. health care system and health policy process, including current challenges in the areas of health care delivery, financing and policy.

### PubH 6553 Health Care Management Ethics
- **Type:** A-F
- **Credit(s):** 1
- **Instructor:** Drill-Mellum, Richard D
- **Description:** Student may contact the instructor or department for information.

### PubH 6555 Topics in Health Economics
- **Type:** A-F
- **Credit(s):** 2
- **Instructor:** Abraham, Jean Marie
- **Description:** Student may contact the instructor or department for information.

### PubH 6556 Health Finance II
- **Credit(s):** 3
- **Instructor:** McCullough, Jeffrey S
- **Description:** Student may contact the instructor or department for information.

### PubH 6560 Operations Research and Quality in Health Care
- **Type:** A-F
- **Credit(s):** 2
- **Instructor:** potthoff, Sandra Jean
- **Description:** Student may contact the instructor or department for information.

### PubH 6562 Information Technology in Health Care
- **Credit(s):** 2
- **Instructor:** Parente, Stephen T
- **Description:** Student may contact the instructor or department for information.

### PubH 6563 Integrated Delivery Systems
- **Type:** A-F
- **Credit(s):** 2
- **Instructor:** Zismer, Daniel Kevin
- **Description:** Student may contact the instructor or department for information.
PubH 6564 Private Purchasers of Health Care: Roles of Employers and Health Plans in U.S. Health Care System  
A-F only, 2 credit(s);  
Instructor: Christianson, Jon B  
Description: Student may contact the instructor or department for information.

PubH 6565 Innovation of Healthcare Services  
A-F only, 2 credit(s);  
Instructor: Armbruster, Ryan Richard  
Description: Student may contact the instructor or department for information.

PubH 6568 Interprofessional Teamwork in Health Care  
2 credit(s);  
Instructor: Gilliam, Thomas Richard  
Description: Student may contact the instructor or department for information.

A-F only, 1-4 credit(s), max credits 8;  
Instructor: Henry, William Floyd  
Description: Student may contact the instructor or department for information.

PubH 6570 Topics: Healthcare Administration  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Henry, William Floyd  
Description: Student may contact the instructor or department for information.

PubH 6570 Topics: Healthcare Administration  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Bauer, Paul J  
Description: Student may contact the instructor or department for information.

PubH 6570 Topics: Healthcare Administration: Managing the Embedded Medical Practice  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Zismer, Daniel Kevin  
Description: This course seeks to provide graduate students the opportunity to consider the application of modern leadership and management principles and practices to health sectors across the globe, and to stimulate consideration for "Careers of Impact on the Global Stage." The course will offer an overview of health sectors in developing and developed economies (there are about 200 nations in the World, and all are dissatisfied with the performance of their health sectors--all are in various stages of health sector reform). Profiles and patterns of reform in a nation's health sector will be assessed and made available on-line for reference in the course. The role of leadership in the design and management of enhanced health sector performance will be considered in the context of macro social, political, cultural and economic aspects. While the course may be relevant for careers of impact in both developed and developing economies, there will be priority attention focused on the challenges of leadership for health gain and health care in developing countries. The instructors for this course share 40 years of experience in developing and managing healthcare systems around the world.

PubH 6570 Topics: Healthcare Administration: Managing the Embedded Medical Practice  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Zismer, Daniel Kevin  
Description: This course seeks to provide graduate students the opportunity to consider the application of modern leadership and management principles and practices to health sectors across the globe, and to stimulate consideration for "Careers of Impact on the Global Stage." The course will offer an overview of health sectors in developing and developed economies (there are about 200 nations in the World, and all are dissatisfied with the performance of their health sectors--all are in various stages of health sector reform). Profiles and patterns of reform in a nation's health sector will be assessed and made available on-line for reference in the course. The role of leadership in the design and management of enhanced health sector performance will be considered in the context of macro social, political, cultural and economic aspects. While the course may be relevant for careers of impact in both developed and developing economies, there will be priority attention focused on the challenges of leadership for health gain and health care in developing countries. The instructors for this course share 40 years of experience in developing and managing healthcare systems around the world.
PubH 6600 Topics: Maternal and Child Health: Qualitative Research Methods in Pub Hlth Practice
2 credit(s), max credits 20, 20 completions allowed;
Instructor: Bonilla,Zobeida E.
Description: PubH 6600: Qualitative Research Methods in Public Health Practice This is a 2-credit course in applied qualitative research methods emphasizing public health practice. The course focuses on the fields of Maternal and Child Health and Community Health Education.

PubH 6613 Children and Youth With Special Health Care Needs
2 credit(s);
Instructor: Bonilla,Zobeida E.
Description: Student may contact the instructor or department for information.

PubH 6617 Practical Methods for Secondary Data Analysis
3 credit(s);
Instructor: Oakes,Michael
Description: Student may contact the instructor or department for information.

PubH 6630 Foundations of Maternal and Child Health Leadership
3 credit(s);Public Health MCH major or instr consent Credit will not be granted if credit has been received for: PUBH 6655;
Instructor: Oberg MD,Charles N
Description: 1. First, it is designed to orient you to a maternal and child public health perspective for assessing and meeting the health needs of women, children, adolescents and families. The class will examine historical and current principles, programs, policies, and practices related to these populations. Historically, MCH has focused on children and their mothers; however, today MCH emphasizes women's health beyond their reproductive and parenting roles, and it also emphasizes families (and other family members such as fathers and grandparents) as the critical social context influencing children's health and development. 2. Second, it is designed to promote MCH leadership through the integration of core MCH content, critical competencies and mentorship.
Style: 60% Lecture, 20% Discussion, 20% Small Group Activities.
Grading: 80% reports/papers, 20% class participation.

PubH 6686 Global Reproductive Health
2 credit(s);
Instructor: Hellerstedt,Wendy L
Description: Student may contact the instructor or department for information.

PubH 6700 Foundations of Public Health
3 credit(s);
Instructor: Virnig,Beth A.
Description: In this course, we will examine the history, values, contexts, principles, frameworks, and organization of delivery systems that are a foundation for public health administration and practice. We will focus on the administrative processes and strategies that drive and support achieving results efficiently, effectively, and responsively. We will explore policy and programming challenges and opportunities in strategic public health issues. Grounded in theory and concepts, we will incorporate the core competencies and skills for public health professionals and focus on developing the problem solving and decision making skills through case studies and debates.
Style: 40% Lecture, 40% Discussion, 10% Small Group Activities, 10% Student Presentation.

PubH 6717 Decision Analysis for Health Care
2 credit(s);
Instructor: Kuntz,Karen M
Description: Influenza immunization rates among non-elderly individuals with high-risk medical conditions are below target levels in the United States. How can we optimize vaccine delivery for these individuals, particularly during periods of national influenza vaccine shortages? There is disagreement among physicians, administrators, and board members about how this year's capital should be allocated to competing strategic initiatives. In which projects should the hospital system invest its capital? A bioterrorism attack would require rapid deployment of medical and pharmaceutical supplies to exposed individuals. What are the optimal strategies for pre-attack stockpiling and post-attack distribution and dispensing of supplies? Decisions in health care and public health at the individual, organizational, and policy levels involve tradeoffs among competing objectives, uncertainty about outcomes, incomplete information, and different attitudes among stakeholders towards risk and reward. In this course you will learn quantitative methods for structuring, analyzing and solving decision problems using decision trees and decision tree software, with a focus on the process of decision making aimed at providing insights into the situation. Upon completion of the course, you will be equipped to apply these methods to a range of practical problems you will face in your clinical, managerial or research career.
**PubH 6724 The Health Care System and Public Health**

- **3 credit(s);**
- **Instructor:** Blewett, Lynn Ann
- **Description:** Student may contact the instructor or department for information.

**PubH 6741 Ethics in Public Health: Professional Practice and Policy**

- **A-F only, 1 credit(s);**
- **Instructor:** Parry, Susan
- **Description:** Student may contact the instructor or department for information.

**PubH 6741 Ethics in Public Health: Professional Practice and Policy**

- **A-F only, 1 credit(s);**
- **Instructor:** Gollust, Sarah Elizabeth
- **Description:** Public health policy is often the product of controversy. Scientific considerations blend with political and ethical conflicts in public health. Questions of autonomy, liberty, individual rights, power, coercion, justice, discrimination, stigma, community and the common good are central to public health policy and practice? and are therefore the basis for the core ethical challenges in public health. This seven-week course will introduce students to public health ethics, with a focus on two central ethical tensions shaping public health policy and practice: (1) allocating resources, and (2) balancing individual and community concerns. In discussing these tensions, we will attend to the important ethical issues of justice and health inequalities. Recognizing that public health graduates will be engaged in policy and practice, the course begins by exploring the ethics of priority setting at both the macro (policy) and micro (practice) levels. The second half of the course will discuss the balancing of individual and community interests as reflected in public health screening, prevention, and health promotion programs, and we will maintain the macro (policy) and micro (practice) distinction previously introduced. The course is designed to flexibly accommodate current pressing topics in public health practice and policy, such as health care reform, obesity, pandemic flu, and other emergent issues. While the focus of this course is on domestic issues in practice and policy, the frameworks and ethical concepts discussed can be applied to international issues, and students may choose an international topic to examine for the concluding course exercise.
- **Style:** 50% Lecture, 25% Discussion, 20% Small Group Activities, 5% Student Presentation.
- **Grading:** 25% reports/papers, 65% reflection paper, 10% class participation.

**PubH 6742 Ethics in Public Health: Research and Policy**

- **A-F only, 1 credit(s);**
- **Instructor:** Turner, Leigh
- **Description:** Student may contact the instructor or department for information.

**PubH 6751 Principles of Management in Health Services Organizations**

- **A-F only, 2 credit(s);**
- **Instructor:** White, Katie Marie
- **Description:** Student may contact the instructor or department for information.

**PubH 6751 Principles of Management in Health Services Organizations**

- **A-F only, 2 credit(s);**
- **Instructor:** Riley, William J
- **Description:** Student may contact the instructor or department for information.

**PubH 6755 Planning and Budgeting for Public Health**

- **OPT No Aud, 2 credit(s);**
- **Instructor:** Barry JD, Anne M
- **Description:** Student may contact the instructor or department for information.

**PubH 6765 Continuous Quality Improvement: Methods and Techniques**

- **3 credit(s);**
- **Instructor:** Riley, William J
- **Description:** Student may contact the instructor or department for information.
PubH 6780 Topics: Public Health Administration and Policy: Public Health Leadership
1 credit(s), max credits 40, 20 completions allowed;
Instructor: Malcolm, Jan Kathleen
Description: Student may contact the instructor or department for information.

2 credit(s), max credits 40, 20 completions allowed;
Instructor: Moran PhD, Jack Wallace
Description: Student may contact the instructor or department for information.

PubH 6801 Health and Human Rights
3 credit(s);
Instructor: Allison, Kirk Charles
Description: PubH 6801 Health and Human Rights Wednesdays, 5:40-8:30 pm, 9/07-12/22 (3 Cr) Instructor: Kirk C. Allison, Ph.D., M.S. Open to all Academic Health Center, Graduate, Professional students and advanced undergraduates (interested others, including from the community, may contact instructor: 612-626-6559, alli0001@umn.edu) Enrollment via U of MN Onestop (#21398) Readings & resources will be via Moodle, Electronic Reserve or linked through the syllabus. Written work: Reaction papers (3 x 3 pgs), final paper (10-15 pgs), Moodle log entries, written final. This course counts toward the MPH Global Health Interdisciplinary Concentration, the Graduate Minor in Human Rights and Law School Human Rights Concentration This course addresses topics at the intersection of: - History, philosophical frameworks and groundings of human rights - The development of the nexus between health and human rights - Topics at the crossroads of health and human rights (historical and contemporary), such as - Public Health powers and human rights - Eugenics - Mental health, psychiatry and human rights - Disability, health and human rights - Children's health / child labor - Gender, health, human rights - Trafficking / Organ trade - Reproductive health, population policy & human rights - Global burden of disease, tobacco control and human rights - Research and human rights - Pandemics, discrimination & access to essential medicines Guest speakers will illuminate specific contexts.
Style: 35% Lecture, 25% Discussion, 10% Small Group Activities, 5% Student Presentation, 20% Guest Speakers, 5% Web Based. These are approximate distributions. Students have an option of a presentation in lieu of the final reaction paper.
Grading: 25% final exam, 25% reports/papers, 5% journal, 30% reflection paper, 15% class participation. "Journal" = Moodle discussions An in-class presentation can be substituted for the final reflection paper for 10%.
Exam Format: A few identifications but mostly a series of contextual questions and discussions. It is open note. The exam emphasizes thinking through a context rather than memorization of factoids (although certain things anyone in the course should know).

PubH 6802 Managing Electronic Health Information
3 credit(s);
Instructor: Wholey, Douglas R
Description: Managing health information is a central function of health care organizations. Information is used for managing population health, profiling providers, and measuring quality. This course describes the organizational context of health information. Sources and types of health information, organizational processes affecting information quality, consistency, completeness, and accuracy, methods for organizing information, and use of information will be discussed. Relational data theory will be used to describe the structure of information and Structured Query Language (SQL) will be used to create and query databases. Students will be introduced to the basic programming skills necessary to manage data in research projects. Programming aspects of the course will use SQL procedure in the SAS language. "...in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it." Herbert A. Simon, 1971, "Designing Organizations for an Information-Rich World", in Martin Greenberger, Computers, Communication, and the Public Interest, Baltimore, Col. 70, MD: The Johns Hopkins Press, p. 187-202).

PubH 6804 Community Mental Health
2 credit(s);
Instructor: McAlpine, Donna D
Description: Student may contact the instructor or department for information.

PubH 6806 Principles of Public Health Research
2 credit(s);
Instructor: Call PhD, Kathleen Thiede
Description: Student may contact the instructor or department for information.

PubH 6811 Health Disparities Research: Measures, Methods, and Data
OPT No Aud, 2 credit(s);
Instructor: Call PhD, Kathleen Thiede
Description: Student may contact the instructor or department for information.

PubH 6832 Economics of the Health Care System
3 credit(s); [Grad or professional school] student, knowledge of [microeconomic analytical tools, analytical statistics] or instr consent
Credit will not be granted if credit has been received for: ECON 5890;
Instructor: Nyman, John A.
Description: This course is intended to give the student an understanding of and appreciation for the traditional issues in health economics. Historical, theoretical and empirical perspectives are applied to the various topics covered: the role of prices, the production of health, the demand for health care, the demand for health insurance, the health insurance market and managed care, the market for physicians' services, production and cost of health care in hospitals and nursing homes, labor issues, pharmaceuticals, cost effectiveness analysis, equity and efficiency, role of government in the health economy, international comparisons, Medicaid and Medicare, and national health insurance and reform. The course relies on the use of conventional microeconomic analytical tools. Students should also have a basic knowledge of fundamental descriptive and analytical statistics. Students will not be expected to know calculus.

PubH 6863 Understanding Health Care Quality
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

PubH 6901 Foundations of Public Health Nutrition Leadership
2 credit(s);
Instructor: Stang, Jamie Sue
Description: This course provides an overview of the fundamental roles, responsibilities and competencies needed to succeed in the field of public health nutrition. It is designed for students in the public health nutrition MPH program. During this course, you will build skills in essential public health nutrition functions such as communications, cultural competence, professional self-assessment and public policy and advocacy. Further, this course will enable you to articulate a personal leadership style and philosophy related to public health nutrition practice.
Style: 55% Lecture, 10% Discussion, 30% Small Group Activities, 5% Student Presentation.
Grading: 60% special projects, 5% attendance, 15% reflection paper, 10% in-class presentation.

PubH 6902 Maternal, Infant, and Preschool Nutrition
2 credit(s);
Instructor: Stang, Jamie Sue
Description: This 2-credit course will provide an overview of nutrition issues affecting pregnant and postpartum women, females of reproductive age, infants and children through five years of age. The course will integrate public health practice and policy recommendations with evidence-based clinical practice guidelines to provide a comprehensive view of maternal and infant nutrition issues from a public health perspective. This course will also provide students with an opportunity to develop public health communications and media skills through a group project.
Style: 80% Lecture, 10% Film/Video, 10% Small Group Activities.
Grading: 60% special projects, 20% in-class presentation, 15% class participation, 5% other evaluation.

PubH 6903 Child and Adolescent Nutrition
2 credit(s);
Instructor: Stang, Jamie Sue
Description: Student may contact the instructor or department for information.

PubH 6905 Nutrition for Public Health Promotion and Disease Prevention
2 credit(s); Grad student or instr consent
Credit will not be granted if credit has been received for: PUBH 3905;
Instructor: Laska, Melissa Nelson
Description: This course covers nutrition topics of contemporary interest. Concepts/facts about science of human nutrition are discussed in relation to personal/community nutrition problems/concerns. This is an applied introductory course with labs.
Style: 25% Lecture, 15% Discussion, 40% Laboratory, 5% Student Presentation, 15% Guest Speakers. The course is structured as a
weekly seminar with about an hour of lecture and an hour of lab work and small group activities. Discussion topics will be integrated throughout the course.

**Grading:** 22% mid exam, 23% final exam, 20% reports/papers, 15% special projects, 5% in-class presentation, 15% laboratory evaluation.

**PubH 6915 Nutrition Assessment**
2 credit(s);
Instructor: Himes, John H
Description: Student may contact the instructor or department for information.

**PubH 6915 Nutrition Assessment**
2 credit(s);
Instructor: Himes, John H
Description: Student may contact the instructor or department for information.

**PubH 7094 Culminating Experience: Community Health Promotion**
S-N only, 1-6 credit(s), max credits 6;
Instructor: Forster, Jean
Description: Student may contact the instructor or department for information.

**PubH 7096 Field Experience: Community Health Promotion**
S-N only, 1-6 credit(s), max credits 6;
Instructor: Lytle, Leslie Ann
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: McGovern, Patricia Marie
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Nachreiner, Nancy Martha
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Wattenberg, Elizabeth Vaughn
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Allwood, Paul Bancroft
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Brosseau, Lisa M
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Ramachandran, Gurumurthy
Description: Student may contact the instructor or department for information.

**PubH 7193 Directed Study: Environmental Health**
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Raynor, Peter Cameron
Description: Student may contact the instructor or department for information.
PubH 7193 Directed Study: Environmental Health
OPT No Aud, 1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Toscano Jr, William A
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: McGovern, Patricia Marie
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Gerberich PhD, Susan Goodwin
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Osterholm, Michael T
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Hedberg, Craig W
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Medus PhD, Carlota
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Nachreiner, Nancy Martha
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Wattenberg, Elizabeth Vaughn
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Brosseau, Lisa M
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Simcik, Matt
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Ramachandran, Gurumurthy
Description: Student may contact the instructor or department for information.
PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Peterson,Lisa Ann
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Maldonado,George
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Raynor,Peter Cameron
Description: Student may contact the instructor or department for information.

PubH 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Alexander,Bruce H
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: McGovern,Patricia Marie
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Gerberich PhD,Susan Goodwin
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Osterholm,Michael T
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Hedberg,Craig W
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Mandel,Jeffrey H
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Nachreiner,Nancy Martha
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Wattenberg,Elizabeth Vaughn
PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Allwood, Paul Bancroft
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Brosseau, Lisa M
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Simcik, Matt
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Ramachandran, Gurumurthy
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Peterson, Lisa Ann
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Raynor, Peter Cameron
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Alexander, Bruce H
Description: Student may contact the instructor or department for information.

PubH 7196 Field Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 5, 5 completions allowed;
Instructor: Toscano Jr, William A
Description: Student may contact the instructor or department for information.

PubH 7280 Public Health Advocacy Through Professional Organizations
S-N only, 0.5-2 credit(s), max credits 2;
Instructor: Hart MD, James F
Description: Student may contact the instructor or department for information.

PubH 7291 Independent Study: Public Health Practice
S-N only, 0.5-2 credit(s), max credits 2;
Instructor: Hart MD, James F
Description: Student may contact the instructor or department for information.

PubH 7294 Master's Project: Public Health Practice
S-N only, 0.5-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Summerbell, Sarah Beth
Description: Student may contact the instructor or department for information.
PubH 7296 Field Experience: Public Health Practice  
S-N only, 0.5-6 credit(s), max credits 24, 4 completions allowed; Public health practice MPH major, instr consent Credit will not be granted if credit has been received for: CVM 6516;  
Instructor: Summerbell, Sarah Beth  
Description: Student may contact the instructor or department for information.

PubH 7391 Independent Study: Epidemiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Singer, Randall  
Description: Student may contact the instructor or department for information.

PubH 7392 Readings in Epidemiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: French, Simone A  
Description: Student may contact the instructor or department for information.

PubH 7394 Culminating Experience: Epidemiology  
S-N only, 1-6 credit(s), max credits 6;  
Instructor: Pankow, James Scott  
Description: Student may contact the instructor or department for information.

PubH 7396 Field Experience: Epidemiology  
S-N only, 1-5 credit(s), max credits 5;  
Instructor: Jones-Webb, Rhonda Jean  
Description: Student may contact the instructor or department for information.

PubH 7401 Fundamentals of Biostatistical Inference  
4 credit(s);  
Instructor: Maclehose, Richard F  
Description: Student may contact the instructor or department for information.

PubH 7405 Biostatistics: Regression  
4 credit(s);  
Instructor: Le, Chap T.  
Description: Student may contact the instructor or department for information.

PubH 7415 Introduction to Clinical Trials  
3 credit(s);  
Instructor: Telke, Susan Elizabe  
Description: Student may contact the instructor or department for information.

PubH 7415 Introduction to Clinical Trials  
3 credit(s);  
Instructor: Chu, Haitao  
Description: Student may contact the instructor or department for information.

PubH 7430 Statistical Methods for Correlated Data  
3 credit(s);  
Instructor: Wolfson, Julian  
Description: Correlated data arise in many situations, particularly when observations are made over time and space or on individuals who share certain underlying characteristics. In this course, we will study techniques for exploring and describing correlated data, along with statistical methods for estimating population parameters (mostly means) from these data. We will focus primarily on the class of generalized linear models (both with and without random effects) for normally and non-normally distributed data. Wherever possible, techniques will be illustrated using real-world examples. Computing will be done using R and SAS.  
Style: 100% Lecture.  
Grading: 33% mid exam, 33% reports/papers, 33% written homework. Final grade is better of (1/3 homework + 1/3 midterm + 1/3 final project) OR (1/2 homework + 1/2 final project)  
Exam Format: Midterm: In-class, closed-book Final: Take-home data analysis project (~8 pages)
PubH 7445 Statistics for Human Genetics and Molecular Biology  
   3 credit(s);  
   Instructor: Reilly, Cavan Sheerin  
   Description: Student may contact the instructor or department for information.

PubH 7450 Survival Analysis  
   3 credit(s);  
   Instructor: Pan, Wei  
   Description: Student may contact the instructor or department for information.

PubH 7460 Advanced Statistical Computing  
   3 credit(s);  
   Instructor: Connett, John E  
   Description: Student may contact the instructor or department for information.

PubH 7470 Statistics for Translational and Clinical Research  
   3 credit(s);  
   Instructor: Le, Chap T.  
   Description: Student may contact the instructor or department for information.

PubH 7494 Master's Project: Biostatistics  
   S-N only, 1-3 credit(s), max credits 3, 1 completion allowed;  
   Instructor: Bandyopadhyay, Dipankar  
   Description: Student may contact the instructor or department for information.

PubH 7580 Organizational Management in Long Term Care  
   2-4 credit(s), max credits 4, 1 completion allowed;  
   Instructor: Grant, Leslie Alan  
   Description: Student may contact the instructor or department for information.

PubH 7582 Practicum in Long-Term Care Administration  
   S-N only, 4 credit(s);  
   Instructor: Grant, Leslie Alan  
   Description: Student may contact the instructor or department for information.

PubH 7584 Health Care and Medical Needs  
   A-F only, 2 credit(s);  
   Instructor: Grant, Leslie Alan  
   Description: Student may contact the instructor or department for information.

PubH 7588 Information Uses in Long-Term Care  
   A-F only, 2 credit(s);  
   Instructor: Potthoff, Sandra Jean  
   Description: Student may contact the instructor or department for information.

PubH 7591 Independent Study: Health Care Administration  
   1-4 credit(s), max credits 20, 20 completions allowed;  
   Instructor: Grant, Leslie Alan  
   Description: Student may contact the instructor or department for information.

PubH 7691 Independent Study: Maternal and Child Health  
   1-4 credit(s), max credits 20, 20 completions allowed;  
   Instructor: Bretl, Lynn Muenzenberger  
   Description: Student may contact the instructor or department for information.

PubH 7694 Culminating Experience: Maternal and Child Health  
   S-N only, 2-4 credit(s), max credits 4;
Instructor: Bonilla, Zobeida E.
Description: Student may contact the instructor or department for information.

PubH 7696 Field Experience: Maternal and Child Health
S-N only, 1-4 credit(s), max credits 4;
Instructor: Himes, John H
Description: Student may contact the instructor or department for information.

PubH 7784 Master's Project Seminar: PHAP and HSRP&A
A-F only, 1 credit(s), max credits 2;
Instructor: McAlpine, Donna D
Description: Student may contact the instructor or department for information.

PubH 7796 Field Experience: Public Health Administration and Policy
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Gollust, Sarah Elizabeth
Description: Student may contact the instructor or department for information.

PubH 7894 MS in Health Services Research, Policy, and Administration Plan B Project
S-N only, 1-2 credit(s), max credits 4;
Instructor: Call PhD, Kathleen Thiede
Description: Student may contact the instructor or department for information.

PubH 7894 MS in Health Services Research, Policy, and Administration Plan B Project
S-N only, 1-2 credit(s), max credits 4;
Instructor: Nyman, John A.
Description: Student may contact the instructor or department for information.

PubH 7894 MS in Health Services Research, Policy, and Administration Plan B Project
S-N only, 1-2 credit(s), max credits 4;
Instructor: Wholey, Douglas R
Description: Student may contact the instructor or department for information.

PubH 7894 MS in Health Services Research, Policy, and Administration Plan B Project
S-N only, 1-2 credit(s), max credits 4;
Instructor: McAlpine, Donna D
Description: Student may contact the instructor or department for information.

PubH 7894 MS in Health Services Research, Policy, and Administration Plan B Project
S-N only, 1-2 credit(s), max credits 4;
Instructor: Kuntz, Karen M
Description: Student may contact the instructor or department for information.

PubH 7894 MS in Health Services Research, Policy, and Administration Plan B Project
S-N only, 1-2 credit(s), max credits 4;
Instructor: Sainfort, Francois
Description: Student may contact the instructor or department for information.

PubH 7991 Independent Study: Public Health Nutrition
1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Stang, Jamie Sue
Description: Student may contact the instructor or department for information.

PubH 7994 Culminating Experience: Public Health Nutrition
S-N only, 1-6 credit(s), max credits 6;
Instructor: Harnack, Lisa Joan
Description: Student may contact the instructor or department for information.
PubH 7996 Field Experience: Public Health Nutrition
S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Miles,Aida
Description: Student may contact the instructor or department for information.

PubH 8120 Occupational Health and Safety Research Seminar
S-N only, 1 credit(s), max credits 12, 12 completions allowed;
Instructor: Gerberich PhD,Susan Goodwin
Description: This course builds on other coursework, including the basic epidemiology, biostatistics, and occupational health- and safety-related courses. It enables students from multiple disciplines to synthesize information, in concert with other coursework, to enhance critical thinking and application to specific research efforts. Activities include: discussions/critiques of various aspects of research projects (ideas for projects; proposals; development of methods; analyses; interpretation); informal lectures and presentations by students, faculty and guest lecturers; practice presentations for thesis committees and professional/other meetings; field trips relevant to occupational health and safety and other research areas.

PubH 8140 Validity Concepts in Epidemiologic Research
S-N only, 2 credit(s);
Instructor: Maldonado,George
Description: Student may contact the instructor or department for information.

PubH 8141 Doctoral Seminar in Observational Inference
S-N only, 2 credit(s), max credits 20, 10 completions allowed;
Instructor: Maldonado,George
Description: This seminar course in observational inference is designed for doctoral students in Public Health who are interested in practicing the fundamentals of epidemiologic inference, including methods for designing, analyzing and interpreting epidemiologic studies. This course is offered every semester. Contact Dr. George Maldonado for the topic for the current semester: GMPhD@umn.edu.
Style: 100% Discussion.
Grading: 100% class participation.

PubH 8160 Advanced Toxicology
2 credit(s);
Instructor: Toscano Jr,William A
Description: Cellular/molecular mechanisms by which xenobiotics cause toxicity. Investigative approaches to current research problems in toxicology/carcinogenesis. Apoptosis, cell cycle regulation, genetic toxicology, molecular mechanisms of chemical carcinogenesis, genetic basis for susceptibility to environmental toxicants. Prerequisites include Introduction to Toxicology, and Metabolomics.
Style: 10% Lecture, 70% Discussion, 20% Student Presentation.
Grading: 25% reports/papers, 50% in-class presentation, 25% class participation.

PubH 8161 Current Literature in Toxicology
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Peterson,Lisa Ann
Description: Style: 50% Discussion, 50% Student Presentation.
Grading: 50% in-class presentation, 50% class participation.

PubH 8163 Toxicology
A-F only, 5 credit(s);
Instructor: Wattenberg,Elizabeth Vaughn
Description: Student may contact the instructor or department for information.

PubH 8166 Experiences in Toxicology Research
A-F only, 3 credit(s);
Instructor: Peterson,Lisa Ann
Description: Student may contact the instructor or department for information.

PubH 8194 Directed Research: Environmental Health
PubH 8194 Directed Research: Environmental Health
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McGovern, Patricia Marie
Description: Student may contact the instructor or department for information.

PubH 8194 Directed Research: Environmental Health
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Gerberich PhD, Susan Goodwin
Description: Student may contact the instructor or department for information.

PubH 8194 Directed Research: Environmental Health
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Ramachandran, Gurumurthy
Description: Student may contact the instructor or department for information.

PubH 8194 Directed Research: Environmental Health
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Alexander, Bruce H
Description: Student may contact the instructor or department for information.

PubH 8194 Directed Research: Environmental Health
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Toscano Jr, William A
Description: Student may contact the instructor or department for information.

PubH 8300 Topics: Epidemiology: Theory & Novel Methods in Epidemiologic Research
1 credit(s), max credits 20, 20 completions allowed;
Instructor: Maclehose, Richard F
Description: This doctoral seminar introduces students to the conceptual foundations of some fundamental issues in epidemiologic methodology. The focus is on how and why a given method, design, or approach might help us explain population health. The emphasis is on the strengths, limitations, and potential alternatives for a given approach. The origins, use, and potential of both classic and cutting-edge methods are considered. Examples and readings are aimed at both clinical/biologic and social/behavioral track students.

PubH 8300 Topics: Epidemiology: Theory & Novel Methods in Epidemiologic Research
1 credit(s), max credits 20, 20 completions allowed;
Instructor: Oakes, Michael
Description: This doctoral seminar introduces students to the conceptual foundations of some fundamental issues in epidemiologic methodology. The focus is on how and why a given method, design, or approach might help us explain population health. The emphasis is on the strengths, limitations, and potential alternatives for a given approach. The origins, use, and potential of both classic and cutting-edge methods are considered. Examples and readings are aimed at both clinical/biologic and social/behavioral track students.

PubH 8341 Advanced Epidemiologic Methods: Concepts
3 credit(s);
Instructor: Oakes, Michael
Description: Student may contact the instructor or department for information.

PubH 8392 Readings in Clinical Research
1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Reding, Mark Thomas
Description: Student may contact the instructor or department for information.

PubH 8400 Topics: Biostatistics: Research Skills in Biostats
1 credit(s), max credits 20, 20 completions allowed;
Instructor: Carlin PhD, Bradley Paige
Description: Student may contact the instructor or department for information.

PubH 8401 Linear Models
PubH 8422 Modern Nonparametrics
4 credit(s);
Instructor: Wu,Baolin
Description: Student may contact the instructor or department for information.

PubH 8432 Probability Models for Biostatistics
3 credit(s);
Instructor: Hughes,John
Description: Student may contact the instructor or department for information.

PubH 8452 Advanced Longitudinal Data Analysis
3 credit(s);
Instructor: Basu,Saonli
Description: Student may contact the instructor or department for information.

PubH 8482 Sequential Analysis
3 credit(s);
Instructor: Koopmeiners,Joseph Stephen
Description: Student may contact the instructor or department for information.

PubH 8494 Directed Research: Biostatistics
S-N only, 1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Chu,Haitao
Description: Student may contact the instructor or department for information.

PubH 8801 Health Services Policy Analysis: Theory
3 credit(s);
Instructor: Moscovice,Ira S
Description: Student may contact the instructor or department for information.

PubH 8805 Sociological Theory in Health Services Research
3 credit(s);
Instructor: Call PhD,Kathleen Thiede
Description: Student may contact the instructor or department for information.

PubH 8810 Research Studies in Health Care
3 credit(s), max credits 6;
Instructor: Rockwood,Todd H
Description: Student may contact the instructor or department for information.

PubH 8811 Research Methods in Health Care
3 credit(s);
Instructor: Dowd,Bryan E
Description: Student may contact the instructor or department for information.

PubH 8831 Writing for Research
OPT No Aud, 2 credit(s);
Instructor: Dowd,Bryan E
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Radosevich, David M
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Virnig, Beth A.
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Allison, Kirk Charles
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Kane, Robert L
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Nyman, John A.
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Rockwood, Todd H
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Kuntz, Karen M
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Sainfort, Francois
Description: Student may contact the instructor or department for information.

PubH 8894 Directed Research: Health Services Research, Policy, and Administration
1-8 credit(s), max credits 8, 8 completions allowed;
Instructor: Allison, Kirk Charles
Description: Student may contact the instructor or department for information.

PubH 8894 Directed Research: Health Services Research, Policy, and Administration
1-8 credit(s), max credits 8, 8 completions allowed;
Instructor: Nyman, John A.
Description: Student may contact the instructor or department for information.

Radiography University of Minnesota Rochester

Radi 3011 Foundations of Radiography
A-F only, 2 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 3021 Radiography Patient Care Techniques
A-F only, 1 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 3101 Radiographic Procedures I
A-F only, 3 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 3111 Radiation Physics
A-F only, 2 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 3301 Clinical Practicum I
A-F only, 5 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radiology  2-300 Fairview University Medical Center (Box 292)

Rad 120 X-Ray Conference
0 credit(s);
Instructor: Dietz Jr, Charles Albert
Description: Student may contact the instructor or department for information.

Rad 121 Medical Roentgenologic Conference
0 credit(s);
Instructor: Dietz Jr, Charles Albert
Description: Student may contact the instructor or department for information.

Rad 123 Surgical Roentgenologic Conference
0 credit(s);
Instructor: Dietz Jr, Charles Albert
Description: Student may contact the instructor or department for information.

Rad 124 Neurosurgical-Roentgenologic Conference
0 credit(s);
Instructor: Truwit MD, Charles L
Description: Student may contact the instructor or department for information.

Rad 125 Cardiovascular Roentgenologic Conference
0 credit(s);
Instructor: Hunter, David W
Description: The lecture is a review of the history of the development of x-rays and an overview of medical imaging in today's practice.
Style: 100% Lecture.
Grading: No information form this lecture will be utilized for any test or grading purposes--although it should enhance their understanding of modern medical diagnosis.

Rad 126 Roentgenologic Conference on Chest Diseases
0 credit(s);
Instructor: Juodis, Edward A
Description: Student may contact the instructor or department for information.

Rad 220 Nuclear Medicine: Clinical Conference
0 credit(s);
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.
Rad 8200 Nuclear Medicine
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Rad 8210 Fundamentals of Nuclear Medicine
1 credit(s);
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Rad 8250 Research: Nuclear Medicine
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Recreation Resource Management 115 Green Hall

RRM 1001 Orientation and Information Systems
A-F only, 1 credit(s);
Instructor: Ek, Alan Ryan
Description: This course provides orientation and planning for students entering the Forest Resources (FR) and Recreation Resources Management (RRM) majors. During this semester students will be introduced to key issues in their fields of study. Description of careers, career planning (choice of major tracks, internships, summer experience, mentoring), academic advising and engagement with alumni contacts are major components of the course. Introduction to professional skill building includes information technology tools in the workplace and access to library and research tools. At the end of this course students should know the kind of course work needed for their degree choice as well as the timing of when to take courses to successfully complete their undergraduate degree program. Students should know what the student learning centers (SLC) and SMART commons are and how to use them. In addition students should be able to: a) write a cover letter and develop a resume targeting a specific job of interest to them, b) know how to conduct a job search and prepare for a job interview, c) find an internship of interest using resources at the St. Paul Campus Career Center, d) find and apply for study abroad opportunities, e) understand how to use the campus libraries to access information, f) have an appreciation for and obtain some exposure to the importance of geospatial data to their field of study, g) manipulate data in an EXCEL spreadsheet, and h) assess their desire to continue their education beyond the baccalaureate level.

RRM 4293 Directed Study
1-5 credit(s), max credits 12, 12 completions allowed;
Instructor: Schneider, Ingrid Eleanor
Description: Students select/conduct a study of or project on a topic of personal interest in consultation with faculty member. Documented by initial proposal and reports of accomplishment.

RRM 4293 Directed Study
1-5 credit(s), max credits 12, 12 completions allowed;
Instructor: Messer, Cynthia Cosdon
Description: Students select/conduct a study of or project on a topic of personal interest in consultation with faculty member. Documented by initial proposal and reports of accomplishment.

RRM 4293 Directed Study
1-5 credit(s), max credits 12, 12 completions allowed;
Instructor: Davenport, Mae Allen
Description: Students select/conduct a study of or project on a topic of personal interest in consultation with faculty member. Documented by initial proposal and reports of accomplishment.

RRM 5259 Visitor Behavior Analysis
3 credit(s);
Instructor: Davenport, Mae Allen
Description: Student may contact the instructor or department for information.

Rec 1501 Orientation to Leisure and Recreation
3 credit(s);
Instructor: Morrissey, Sean Patrick
Description: This course is designed as an introduction to the field of recreation and leisure studies through several field trips and service learning opportunities that highlight a variety of recreation programs, facilities, services and delivery systems. An experiential approach allows students to see firsthand the opportunities and careers in the recreation industry. Most class periods will be spent in the field exploring various agencies and meeting with professionals in the industry (YMCA Camp Ihduhapi, Three Rivers Park District - Silverwood & French Regional Park, REI, University Recreation Center, Oxford Community Center, National Sports Center, and Wilderness Inquiry). Students also help to plan events and operate the exciting Gopher Adventure Race (GAR) on-campus!
Style: 25% Lecture, 5% Small Group Activities, 40% Field Trips, 5% Guest Speakers, 25% Service Learning.
Grading: 15% special projects, 20% attendance, 30% reflection paper, 15% in-class presentation, 20% class participation.

Rec 1905 Freshman Seminar: Go Outside and Play!
OPT No Aud, 3 credit(s), max credits 6;
Instructor: Magnuson PhD, Connie
Description: Course Title: Go Outside and Play! Do you like to play? This course is designed to introduce students to the great outdoors right here in the Twin Cities. There are tremendous resources available within an easy walk, bike or bus ride/light rail of campus including local parks, State Parks, and even a National Park! There are also outstanding agencies and programs on and around campus with opportunities for involvement and becoming connected and engaged in the community. This is a hands-on, in the field class where students develop and lead day-trips around the Twin Cities finding fun outdoor activities to try. This class meets all day for 6 Fridays plus students will be on staff for the Gopher Adventure Race. Our first day will be spent canoeing on the Mississippi river in voyageur canoes with Wilderness Inquiry and the National Park Service. The rest of the trips are up to you. Are you up for an adventure?

Rec 3281 Research and Evaluation in Recreation, Park, and Leisure Studies
A-F only, 4 credit(s);
Instructor: Brown PhD, Tony Kevin
Description: REC 3281 provides a basic overview and working knowledge of research and evaluation and its value in the application and delivery of organized recreation and leisure services. The course explores various approaches, skills, methods, and techniques of research and evaluation. Over the course of the semester, students plan, design, and implement real-life evaluation projects for local recreation agencies and organizations.
Style: 50% Lecture, 25% Discussion, 25% Small Group Activities.
Grading: 10% mid exam, 40% special projects, 40% written homework, 10% additional semester exams.

Rec 3541W Recreation Programming
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Miller, Susie
Description: The emphasis of this course is on the program planning process from creating the idea through the evaluation. Various formats such as leisure learning, field trips and special event participation are highlighted as well as developing the skills needed to produce professional programs for diverse populations. This is a hands-on class and skills acquired and project development learned can be used in a wide variety of recreation settings.
Rec 3796 Senior Internship in Recreation, Park, and Leisure Studies
S-N only, 9 credit(s);
Instructor: Magnuson PhD, Connie
Description: A capstone of the student's academic program, this practical experience under the supervision of a recreational professional provides students the opportunity to apply acquired academic knowledge while totally immersed in the work place setting full time. The internship is 9-credits for a total of 405 hours in the field. Internships are done once the coursework for the degree has been completed.

Rec 3993 Directed Study in Recreation, Park, and Leisure Studies
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Magnuson PhD, Connie
Description: Explore areas of personal interest and delve into a degree-related topic that may not be covered in depth in the coursework that will be applicable to your chosen career path. During this independent study, you will work with faculty or recreational professionals on creative activities, scholarly research, or other project developments that allow for learning opportunities and contribute to the student's academic program. A great opportunity for getting involved in the field and working with mentors and experts in the field that will provide tremendous learning and networking opportunities.

Rec 3993 Directed Study in Recreation, Park, and Leisure Studies
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ross PhD, Stephen
Description: Scholarly projects (e.g., library or field research) or demonstration projects.

Rec 3993 Directed Study in Recreation, Park, and Leisure Studies
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Kihl PhD, Lisa A
Description: Scholarly projects (e.g., library or field research) or demonstration projects.

Rec 5111 Sports Facilities
A-F only, 3 credit(s);
Instructor: Turman PhD, James C
Description: An overview of sports facilities including the planning, development, design, funding, financing, and construction of such facilities with emphasis on major indoor multipurpose facilities for recreational sports, physical education, and intercollegiate athletics on the college campus and an introduction to public/private arenas and stadiums. The class will tour selected on-campus kinesiology, athletic, and recreational facilities. Students will be assigned a group sports facilities project and present their concepts and plans to the class. Other topic areas may include, operations management, marketing, advertising, public relations, and risk management.
Style: 35% Lecture, 20% Discussion, 15% Small Group Activities, 10% Student Presentation, 15% Field Trips, 5% Guest Speakers.
Grading: 17% final exam, 35% reports/papers, 25% special projects, 5% quizzes, 13% written homework, 5% attendance. Note: attendance also includes in-class presentation and participation.
Exam Format: multiple choice, fill-in, matching, and essay

Rec 5271 Community Leisure Services for Persons with Disabilities
A-F only, 3 credit(s);
Instructor: Magnuson PhD, Connie
Description: This course explores services that have historically been provided for persons with disabilities and how that has drastically changed over the past few decades. We will evaluate how individuals with disabilities are portrayed in popular film and how that influences our perceptions and expectations. We learn about “people first” language, etiquette, and how to interact with a person with a disability. This is done first in the class room and then with a hands-on learning experience in the community. It is designed to be an informative course that will challenge your perceptions and give you a better understanding of working with people of all abilities.

Rec 5461 Foundations of Sport Management
A-F only, 3 credit(s);
Instructor: Schull, Vicki Denise
Description: Student may contact the instructor or department for information.

Rec 5511 Sport and Gender
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: KIN 5511;
Instructor: Buysse PhD, Jo Ann
Description: The primary purpose of this course is to provide students with an opportunity to critically examine, understand and
appreciate women's involvement in-and contributions to-sport and physical activity from a sociological perspective. Students will be expected to analyze, critique, and evaluate a wide range of historical, cultural, economic and socio-psychological issues that have shaped the nature and scope of women's participation in sport, physical activity and leisure. Utilizing feminist perspectives, particular attention will be given to the various ways in which females (and their bodies) are often viewed as fundamentally different-physically, socially and psychologically-from their male counterparts. Much of this analysis will take place against the backdrop of highly organized, competitive sports such as intercollegiate athletics. Students will read and discuss dominant ideologies centered on masculinity and femininity in order to understand how gender is constructed in and through sport. Finally, social identity markers of race/ethnicity, socio economic class, (dis)ability and sexual orientation, and how they influence participation in and the organization of women's and men's sports will be emphasized. It is expected that students in this course are academically prepared to engage in graduate level coursework. Students will be expected to go beyond surface level knowledge and opinions and engage in critical reading and discussion of research. Students must have the ability to analyze, synthesize and evaluate information in a critically reflective manner. This course will be web enhanced through moodle.

**Style:** 30% Lecture, 40% Discussion, 20% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.

**Grading:** 25% mid exam, 25% final exam, 25% reports/papers, 10% in-class presentation, 15% class participation.

**Exam Format:** essay

### Rec 5631 Programming and Promotion in Sport
- **A-F only, 3 credit(s);**
- **Instructor:** Ross PhD, Stephen
- **Description:** While sport promoters can be traced as far back as early 20th century boxing matches, sport marketing as a concept has just recently been credited with the sudden rise in industrial interest. Although the sport industry is still in its early growth period, it has experienced extreme financial prosperity. Largely responsible for the increased popularity and revenue gain of the field is sport marketing. This course is designed to introduce marketing concepts as they apply to the sport industry. Topics such as consumer behavior, market research, the marketing mix and licensing will be covered through the use of interactive discussion and practical application.

### Rec 5801 Legal Aspects of Sport and Recreation
- **A-F only, 4 credit(s);**
- **Instructor:** Allison JD, Rayla
- **Description:** Legal issues related to recreation, park, and sport programs/facilities with public/private sectors.

### Rec 5900 Special Topics: Contemporary Issues in Leisure Services: Outdoor Recreation 3-Season Skills
- **3 credit(s), max credits 12, 12 completions allowed;**
- **Instructor:** Hoffman, Mitchell Lee
- **Description:** This course will look at developing the field skills essential to aspiring outdoor educators and leaders. The learning environment will occur mostly in the outdoor classroom teaching students how to effectively utilize this tool as an educator and instructor. Areas of focus will be instructional strategies, site management, hard skill development and application of outdoor leadership skills. Activities will include mountain biking, rock climbing and outdoor living skills. Students will be expected to operate comfortably in an outdoor environment and field based class sessions are mandatory for course completion. The course meets on Fridays for six weeks and one weekend overnight field experience.

### Rec 5981 Research Methodology in Kinesiology, Recreation, and Sport
- **A-F only, 3 credit(s); MEd or grad student or instr consent Credit will not be granted if credit has been received for: KIN 5981;**
- **Instructor:** Kihl PhD, Lisa A
- **Description:** Defines/reviews various types of research in exercise and sport science, physical education, and recreation studies. Qualitative research, field studies, and introspective research strategies as alternatives to traditional scientific paradigm.

### Rec 5992 Readings: Recreation
- **A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;**
- **Instructor:** Magnuson PhD, Connie
- **Description:** Independent study under tutorial guidance by faculty member on particular topic(s) not covered in regular coursework.

### Rec 5992 Readings: Recreation
- **A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;**
- **Instructor:** Ross PhD, Stephen
- **Description:** Independent study under tutorial guidance by faculty member on particular topic(s) not covered in regular coursework.
Instructor: Kihl PhD, Lisa A
Description: Independent study under tutorial guidance by faculty member on particular topic(s) not covered in regular coursework.

Rec 5995 Problems in Recreation, Park, and Leisure Studies
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Magnuson PhD, Connie
Description: Independent study of leisure service programs, systems, facilities, or policies. Focuses on conduct of recreation programs. Scholarly projects (e.g., library or field research) or demonstration projects.

Rec 5995 Problems in Recreation, Park, and Leisure Studies
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Allison JD, Rayla
Description: Independent study of leisure service programs, systems, facilities, or policies. Focuses on conduct of recreation programs. Scholarly projects (e.g., library or field research) or demonstration projects.

Rec 5995 Problems in Recreation, Park, and Leisure Studies
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Ross PhD, Stephen
Description: Independent study of leisure service programs, systems, facilities, or policies. Focuses on conduct of recreation programs. Scholarly projects (e.g., library or field research) or demonstration projects.

Rec 6796 Practicum in Recreation, Park, and Leisure Studies
S-N only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Buysse PhD, Jo Ann
Description: Practical experiences in recreation under supervision of University faculty member and agency supervisor.

Rec 6796 Practicum in Recreation, Park, and Leisure Studies
S-N only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Magnuson PhD, Connie
Description: Supervised experiences in program operation, management, administration, and supervisory duties in therapeutic recreation, leisure services, or sport management.

Rec 6796 Practicum in Recreation, Park, and Leisure Studies
S-N only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Allison JD, Rayla
Description: Supervised experiences in program operation, management, administration, and supervisory duties in therapeutic recreation, leisure services, or sport management.

Rec 6796 Practicum in Recreation, Park, and Leisure Studies
S-N only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Ross PhD, Stephen
Description: Supervised experiences in program operation, management, administration, and supervisory duties in therapeutic recreation, leisure services, or sport management.

Rec 6796 Practicum in Recreation, Park, and Leisure Studies
S-N only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Kihl PhD, Lisa A
Description: Supervised experiences in program operation, management, administration, and supervisory duties in therapeutic recreation, leisure services, or sport management.

Rec 8995 Research Problems in Recreation, Park, and Leisure Studies
S-N only, 1-4 credit(s), max credits 9, 9 completions allowed;
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Instructor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rec 8995</td>
<td>Research Problems in Recreation, Park, and Leisure Studies</td>
<td>Ross PhD, Stephen</td>
<td>Individual scholarly research.</td>
</tr>
<tr>
<td>RSc 5101</td>
<td>Mathematical Tools for Research Applications in Health, Rehab, and Human Movement Sciences</td>
<td>Ludwig, Paula M</td>
<td>Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>RSc 5200</td>
<td>Introduction to Transcranial Magnetic Stimulation</td>
<td>Carey, James Robert</td>
<td>Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>RSc 5231</td>
<td>Clinical Biomechanics</td>
<td>Ludwig, Paula M</td>
<td>Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>RSc 5294</td>
<td>Independent Study in Rehabilitation Science</td>
<td>Carey, James Robert</td>
<td>Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>RSc 5294</td>
<td>Independent Study in Rehabilitation Science</td>
<td>Mathiowetz PhD, Virgil G</td>
<td>Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>RSc 5294</td>
<td>Independent Study in Rehabilitation Science</td>
<td>Martin PhD, Peggy Mae</td>
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<tr>
<td>RSc 5294</td>
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<td>Snow MD, PhD, LeAnn M</td>
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<td>Kimberley, PT, PhD, Teresa Jacobson</td>
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<tr>
<td>RSc 5294</td>
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<td>Thompson PhD, LaDora V</td>
<td>Student may contact the instructor or department for information.</td>
</tr>
</tbody>
</table>
RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Lowe, Dawn Annette
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Kukulka, Carl G
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Gillick, Bernadette Therese
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Nuckley PhD, David J
Description: Student may contact the instructor or department for information.

RSc 5814 Age, Exercise, and Rehabilitation
2 credit(s);
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

RSc 8100 Rehabilitation Science Seminar
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Mathiowetz PhD, Virgil G
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Martin PhD, Peggy Mae
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Kimberley, PT, PhD, Teresa Jacobson
RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Adamczak, Rich
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Thompson PhD, LaDora V
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Lowe, Dawn Annette
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Kukulka, Carl G
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RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Gillick, Bernadette Therese
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Nuckley PhD, David J
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RSc 8185 Problems in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

RSc 8185 Problems in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Mathiowetz PhD, Virgil G
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RSc 8185 Problems in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
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1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Snow MD, PhD, LeAnn M
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RSc 8185 Problems in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
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Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 8188 Teaching Practicum
A-F only, 1-5 credit(s), max credits 5, 3 completions allowed;
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

RSc 8188 Teaching Practicum
A-F only, 1-5 credit(s), max credits 5, 3 completions allowed;
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Description: Student may contact the instructor or department for information.

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A-F only, 1-5 credit(s), max credits 5, 3 completions allowed;
Instructor: Nuckley PhD, David J
Description: Student may contact the instructor or department for information.

**Religious Studies 245 Nicholson Hall**

**RelS 1034 Introduction to Jewish History and Civilization**
3 credit(s); credit will not be granted if credit already received for: RelA 1034, 3034, JwSt 1034, 3034, RelS 3034 Credit will not be granted if credit has been received for: JWST 1034; Meets CLE req of Historical Perspectives
Instructor: Jassen, Alex P
Description: The course provides a general introduction to Judaism in its many ancient and modern expressions. Students are introduced both to the historical narrative of the Jewish people and the beliefs and practices of the Jewish religion. We begin our story of Jewish history by examining the emergence of Judaism from the world of the Hebrew Bible (Old Testament) and ancient Israel and its continued development under the empires of Persia, Greece, and Rome. We then explore encounters between Judaism, Christianity, and Islam in the medieval world. We then turn to the impact of modernity and the Enlightenment on Judaism and the dramatic transformations that have shaped Judaism in the modern period. Across this broad historical landscape, we explore the diverse beliefs and practices of Judaism. We address the questions of "what do Jews believe?" and "what do Jews do?" through close analysis of different forms of Judaism across time and space. We seek to address the issue of what unites these diverse forms of Judaism and marks them all as Jewish. We also attempt to understand the social, literary, historical, and cultural influences that have helped shape the varieties of Jewish traditions and the influence of Judaism on other religions and cultures. The central ideas and motifs of Judaism to be addressed include: the Bible in Judaism, rabbinic literature, theology, Jewish mysticism (Kabbalah) and philosophy, Jewish law, Jewish nationalism, anti-Semitism, messianism, Jewish culture and identity, the synagogue, ritual and worship, life cycle, festivals and calendar. Students engage with the central questions of Jewish history through reading a wide selection of primary texts in translation, multimedia, classroom discussion, and critical writing assignments. There are no prerequisites for this course. It is intended to provide students with a general introduction to Judaism and stimulate interest in exploring further aspects of Jewish history and civilization and Religious Studies. Full Syllabus at: https://sites.google.com/a/umn.edu/jassen/my-courses/introduction-to-jewish-history-and-civilization
Style: 60% Lecture, 30% Discussion, 10% Small Group Activities.
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.
RelS 3034 Introduction to Jewish History and Civilization

Description: This course provides a general introduction to Judaism in its many ancient and modern expressions. Students are introduced both to the historical narrative of the Jewish people and the beliefs and practices of the Jewish religion. We begin our study of Jewish history by examining the emergence of Judaism from the world of the Hebrew Bible (Old Testament) and ancient Israel and its continued development under the empires of Persia, Greece, and Rome. We then explore encounters between Judaism, Christianity, and Islam in the medieval world. We then turn to the impact of modernity and the Enlightenment on Judaism and the dramatic transformations that have shaped Judaism in the modern period. Across this broad historical landscape, we explore the diverse beliefs and practices of Judaism. We address the questions of "what do Jews believe?" and "what do Jews do?" through close analysis of different forms of Judaism across time and space. We seek to address the issue of what unites these diverse forms of Judaism and marks them all as Jewish. We also attempt to understand the social, literary, historical, and cultural influences that have helped shape the varieties of Jewish traditions and the influence of Judaism on other religions and cultures. The central ideas and motifs of Judaism to be addressed include: the Bible in Judaism, rabbinic literature, theology, Jewish mysticism (Kabbalah) and philosophy, Jewish law, Jewish nationalism, anti-Semitism, messianism, Jewish culture and identity, the synagogue, ritual and worship, life cycle, festivals and calendar. Students engage with the central questions of Jewish history through reading a wide selection of primary texts in translation, multimedia, classroom discussion, and critical writing assignments. There are no prerequisites for this course. It is intended to provide students with a general introduction to Judaism and stimulate interest in exploring further aspects of Jewish history and civilization and Religious Studies. Full Syllabus at: https://sites.google.com/a/umn.edu/jassen/my-courses/introduction-to-jewish-history-and-civilization

Style: 60% Lecture, 30% Discussion, 10% Small Group Activities.

Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.

RelS 3070 Topics in Religious Studies

Description: This course is an interdisciplinary course developed through a National Endowment for the Humanities "Enduring Questions" grant (for details about the grant, visit: http://www.neh.gov/grants/guidelines/EnduringQuestions.html) The guiding question of this course is "What is the nature of the cosmos?" We will pursue the question by comparing cosmological understandings in different civilizations and historical periods. The course will begin by exploring what it means to ask this question, and what is involved in precisely trying to answer it. We will then look at some different answers offered across time and space. We will start with two ancient, non-Western responses: the Sanskrit Hindu tradition and the Native American tradition of the Lakota people. We will then examine the history of Western cosmological thinking by looking at Greco-Roman Antiquity, Medieval Christian and Islamic understandings, and the birth of modern, scientific cosmology in the Scientific Revolution (Galileo, Newton, etc.). The class will end with some reflections on the place and meaning of these cosmological traditions in the world today. Students who took the course in 2011 said that "the diversity and quality of course readings and class discussions allowed for creative exploration of complex ideas." This course "not only makes you think about past civilizations, it forces you to think out of the box. It not only makes you a better a student, it makes you a better human being." "This course teaches you how to empathize with people from radically different belief structures," and "it also made me think more about my own worldview and how I came to have it." "A perfect combination of science, philosophy, mythology, and religion. All you ever need to know to understand the universe!" "Everyone should take this course. Too often, students treat school as a job, and this course changes that. A wonderful course, it really changed the way i view the world." "An unbelievable experience. I signed up to learn about cosmological history, but I also learned so much about myself and the world I live in. Everyone should take this class."

RelS 5072 The New Testament

Description: This course is an interdisciplinary course developed through a National Endowment for the Humanities "Enduring Questions" grant (for details about the grant, visit: http://www.neh.gov/grants/guidelines/EnduringQuestions.html) The guiding question of this course is "What is the nature of the cosmos?" We will pursue the question by comparing cosmological understandings in different civilizations and historical periods. The course will begin by exploring what it means to ask this question, and what is involved in precisely trying to answer it. We will then look at some different answers offered across time and space. We will start with two ancient, non-Western responses: the Sanskrit Hindu tradition and the Native American tradition of the Lakota people. We will then examine the history of Western cosmological thinking by looking at Greco-Roman Antiquity, Medieval Christian and Islamic understandings, and the birth of modern, scientific cosmology in the Scientific Revolution (Galileo, Newton, etc.). The class will end with some reflections on the place and meaning of these cosmological traditions in the world today. Students who took the course in 2011 said that "the diversity and quality of course readings and class discussions allowed for creative exploration of complex ideas." This course "not only makes you think about past civilizations, it forces you to think out of the box. It not only makes you a better a student, it makes you a better human being." "This course teaches you how to empathize with people from radically different belief structures," and "it also made me think more about my own worldview and how I came to have it." "A perfect combination of science, philosophy, mythology, and religion. All you ever need to know to understand the universe!" "Everyone should take this course. Too often, students treat school as a job, and this course changes that. A wonderful course, it really changed the way i view the world." "An unbelievable experience. I signed up to learn about cosmological history, but I also learned so much about myself and the world I live in. Everyone should take this class."

Style: 60% Lecture, 30% Discussion, 10% Small Group Activities.

Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.
RelS 3072 Reading Asian Cultures
A-F only, 3 credit(s);
Instructor: Rouzer, Paul F
Description: Introduction to primary Asian texts in translation, with an emphasis on close reading skills and methodological rigor.

RelS 3078 Jews of the Islamic Mediterranean and Christian Europe, 7th-17th Centuries
3 credit(s); Credit will not be granted if credit has been received for: JWST 3778;
Instructor: Schroeter, Daniel J
Description: The Jewish Diaspora that emerged in late antiquity and the early Middle Ages was remarkably diverse, while at the same time Jews shared common religious and cultural traditions. This course explores how Jews were shaped by the societies and cultures of the Islamic Mediterranean World and Christian Europe from 700 to 1700, while maintaining a distinctive identity. Under the dominant religions of Islam and Christianity, Jews developed autonomous religious and cultural institutions and communities, which frequently changed as Jews were influenced by and adapted to their cultural surroundings and changing historical circumstances. The relationship between diverse Jewish communities throughout the Muslim Mediterranean and Christian Europe is explored. The connections between communities were created and maintained through trade, travel, and the exchange of rabbinical culture and Jewish religious authority across political boundaries. While Jewish status differed under Muslim and Christian rule, this course explores how the experience of Jews was influenced by changing local circumstances, migrations, expulsions, violence, persecution, and resettlement in new locations with the expansion of trade routes and political change in both the Islamic and Christian worlds.
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 35% final exam, 30% reports/papers, 15% class participation.

RelS 3201 The Bible: Context and Interpretation
3 credit(s); Credit will not be granted if credit already received for: RelA 3201, CNES 1201, CNES 3201, JwSt 1201, JwSt 3201; Credit will not be granted if credit has been received for: CNES 3201; Meets CLE req of Literature
Instructor: STAFF
Description: Where did the Hebrew Bible ("Old Testament") come from? In what way do the worldviews and traditions expressed by its ancient authors compare with those of the superpowers of their day, including the Canaanites (from Ugarit), the Hittites, the Egyptians, and the Mesopotamians? How did the text of the Hebrew Bible come to represent a millennium of beliefs, desires, and customs from ancient Israel and Judah, many of which still reverberate in our society today? Integrating a cross-disciplinary spectrum of religion, history, and literature, students in this class will read, analyze, and interpret Hebrew Bible texts in English, using methods employed by biblical scholars. This class fulfills the Liberal Education Requirement of Literature because in it students read the Hebrew Bible as ancient literature, asking questions about language and meaning, literary effects, and the Hebrew Bible's social and historical contexts. Since we will engage in secular study only, analytically examining all relevant religious texts and traditions, students are required to have an open mind and willingness to read and discuss the Bible in a new way.
Style: 60% Lecture, 20% Discussion. Group work
Grading: 33% mid exam, 33% final exam, 17% reports/papers, 17% class participation.
Exam Format: The exams will be a take home essay.

RelS 3321 American Indian Philosophies
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Ghebregzi, Alex Anthony
Description: The purpose of this course is to introduce students to the philosophical thought and spiritual beliefs of native peoples of North America. Students will examine a broad spectrum of issues which influence the worldview of native people on this continent, including European contact and thought. Students may find some of the issues to be controversial and personally challenging, however, a thorough discussion of the impact of European influences is important to understanding native people's resistance and survival. Finally, students will also explore the ways in which native philosophy and spiritual practices shape native life experience in a society viewed by many native people as being at odds with their beliefs.
Style: 60% Lecture, 20% Discussion. Group work
Grading: 33% mid exam, 33% final exam, 17% reports/papers, 17% class participation.
Exam Format: The exams will be a take home essay.
Interpretative essays and articles by scholars in the field will also be introduced to some extent. Topic for Fall 2012: Buddhism and Asian culture. An examination of the impact of Buddhism on the cultures of South Asia, China, Tibet, Korea, and Japan as manifested in literature and film. Attention will be paid to both pre-modern texts and on modern forms of fiction and poetry as well as on contemporary cinema. There will be mandatory film showings approximately every other week.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 60% reports/papers, 30% quizzes, 10% class participation.

**RelS 3520 History of the Holocaust**
- **3 credit(s);** Credit will not be granted if credit has been received for: RELS 3521W;
- **Instructor:** Ashkenazi,Ofer
- **Description:** Student may contact the instructor or department for information.

**RelS 3612 Baroque Rome: Art and Politics in the Papal Capital**
- **3 credit(s);** Credit will not be granted if credit has been received for: ARTH 5335; Meets CLE req of Historical Perspectives
- **Instructor:** Ostrow,Steven F
- **Description:** This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

**RelS 3621 The Christian Right and Left in America: Protestant Liberals, Evangelicals, and Fundamentalists**
- **3 credit(s);** Credit will not be granted if credit has been received for: RELS 5621;
- **Instructor:** Kilde,Jeanne Halgren
- **Description:** Does the contentiousness of the Republican base during this election season herald the demise or the re-invigoration of the Christian Right? Does the Christian Left have any public influence? What can we except from Christian activists on both sides (and in the middle) in the future? This course will trace the roots of Protestant evangelicalism, fundamentalism, and liberal in the 19th and 20th centuries and of traditional and progressive Catholicism in the 20th. We will then explore a number of critical public policy issues that unite these divergent wings of Christianity: science and evolution; gender; social welfare; and the role of the U.S. in divine histories. Christians.
- **Grading:** 30% mid exam, 30% final exam, 30% reports/papers, 10% class participation.

**RelS 3622 'Sinners, Saints, and Savages': Religion in Early America**
- **3 credit(s);**
- **Instructor:** Fischer,Kirsten
- **Description:** The United States is home to an astonishing array of religious beliefs and institutions. While mutual toleration is now a widely-held ideal, it has not always been this way (nor is it universally shared today). This upper-level course, which is run as a discussion seminar, investigates how people of different faiths perceived, reacted to, and changed each other before 1800. Coming from different cultural backgrounds within North America, Europe, and Africa, the people who encountered each other in early America had divergent ideas about the divine and its intentions for humanity, about life here on earth and after death, as well as about racial difference, gender relations, the social order, and relations of authority. In these encounters we can see how religious faiths and institutions variously shaped experiences of European colonization, the growing slave-labor system, and the social order of the new United States. The intense, often coercive, and sometimes brutal conflicts over religion reveal much about the lived experience in early America, and they show that the eventual truce of pluralism and freedom of conscience in this country has been hard-won rather than easily assured. Please contact Prof. Fischer by email for a syllabus (kfischer@umn.edu).
- **Style:** 25% Lecture, 5% Film/Video, 60% Discussion, 10% Small Group Activities.
- **Grading:** 75% reports/papers, 5% attendance, 20% class participation.

**RelS 3671 Hinduism**
- **3 credit(s);** Credit will not be granted if credit has been received for: ALL 3671;
- **Instructor:** Skaria,Ajay
- **Description:** Although Hinduism is today almost universally recognized as one of the major religions of India, scholars generally agree that the term "Hinduism" itself is of rather late origin, and that it gathers together many varied texts, sects, and practices that for several centuries had been identified by a series of different names. This course has three objectives: first, to introduce students to some of the texts that are today considered essential to Hindu philosophical and spiritual traditions; second, to study some of the most powerful debates about the meaning and significance of Hindu texts in modern times; and third, to consider the ways in which Hindu identity today plays a crucial role in the political landscape of India. Our course will also include more wide-ranging discussions regarding the academic study of religious faith, the ways in which disciplines such as anthropology and history approach traditions of faith, and the changing force of religion in a largely secular world. All readings in English.

**RelS 3709 Ancient Iran**
RelS 3714 Islam and the West

3 credit(s); Credit will not be granted if credit has been received for: CAS 3533;
Instructor: Bashiri, Iraj

Description: Intellectual trends defining fundamental differences between Islam and the West arise from their respective historical, philosophical, and intellectual mindsets. The course examines contributing factors to tension, anxiety, and hatred between Muslims and the West, as well as aspects of Islamic and European cultures that inspire respect and emulation. Objectives: - Acquaint the students with the fundamental differences between Islam and Western culture. - Equip students with the means for a better understanding of international events. - Teach students to distinguish different trends and accept them for what they are. - Discuss factors that create tension, anxiety and hatred among peoples and nations. - Examine aspects of Islamic and European cultures that inspire respect and emulation.

Style: 50% Lecture, 20% Film/Video, 10% Discussion, 20% Student Presentation.
Grading: 12% final exam, 27% reports/papers, 36% quizzes, 3% attendance, 12% in-class presentation, 10% other evaluation. Book Report
Exam Format: Essay

RelS 3715 History of the Crusades

3 credit(s);
Instructor: Reyerson, Kathryn L

Description: Taken as a whole, the Crusades make up one of the most fascinating episodes in the history of the Middle Ages. Our primary aim in this class will be to study the crusading phenomenon in its medieval context by engaging with the original documentary remains of the period. What motivated medieval European men and women to set out on the conquest of a land thousands of miles away, about which they knew very little? How did the papacy, as head of the Catholic Church, come to promote violence against the Muslim residents of that land as not merely justifiable, but as positively meritorious, as deserving of a great spiritual reward? How did the Muslim and also Jewish communities who were the primary targets of this violence respond to it, and how did the contact among Christians, Muslims, and Jews which the Crusades made possible transform relations among these groups, the three major monotheistic religions of the West? While focusing on the Crusades as an aspect of medieval history, we will also consider some of the larger questions raised by the history of these expeditions. What is the relationship between violence and religion? Does it differ in the Christian, Muslim, and Jewish traditions? What is the legacy of the crusades? Did they pave the way for the subsequent Western colonial ventures that eventually led to Western domination of much of the non-Western world? Did they set the stage for modern conflicts in the Middle East?

Style: 70% Lecture, 30% Discussion.
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.
Exam Format: essay exams

RelS 3993 Directed Studies

1-4 credit(s), max credits 10, 5 completions allowed;
Instructor: Kilde, Jeanne Haigren

Description: Student may contact the instructor or department for information.

RelS 5072 The New Testament

3 credit(s);
Instructor: STAFF

Description: Was Jesus a Christian or a Jewish prophet? Did later interpreters distort the simple religion of this Galilean charismatic...
teacher who spoke of the essence of a true religion? Was Paul an anti-feminist or a woman’s liberationist? Was he an anti-Semite or a Jew on the margins and one of the most creative thinkers of the early Jesus movement? How did the early church select its scriptures for a New Testament? And why and how were only four gospels selected and many others excluded? These and other questions we will pose in this historical study of the New Testament in its Graeco-Roman and Jewish context. The course will emphasize the nature and variety of religious expression in the early Church; it will treat the gospels in their historical setting, and it will study selected heated discourses between Paul and his churches in a treatment of his letters as conversations. It will also deal with some early interpreters of Paul in the New Testament, and will consider the message of Revelation for a persecuted church. The course will finally sample texts from the Gnostic Gospels of the second century.

RelS 5612 Baroque Rome: Art and Politics in the Papal Capital
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335;
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world’s great capitals.

RelS 5621 The Christian Right and Left in America: Protestant Liberals, Evangelicals, and Fundamentalists
3 credit(s); Credit will not be granted if credit has been received for: RELS 3621;
Instructor: Kilde, Jeanne Halgren
Description: Does the contentiousness of the Republican base during this election season herald the demise or the re-invigoration of the Christian Right? Does the Christian Left have any public influence? What can we except from Christian activists on both sides (and in the middle) in the future? This course will trace the roots of Protestant evangelicalism, fundamentalism, and liberal in the 19th and 20th centuries and of traditional and progressive Catholicism in the 20th. We will then explore a number of critical public policy issues that unite these divergent wings of Christianity: science and evolution; gender; social welfare; and the role of the U.S. in divine histories. Christians.
Grading: 30% mid exam, 30% final exam, 30% reports/papers, 10% class participation.

RelS 5993 Directed Studies
1-4 credit(s), max credits 24, 24 completions allowed;
Instructor: Kilde, Jeanne Halgren
Description: Student may contact the instructor or department for information.

Respiratory Care (Rochester) University of Minnesota Rochester

Resp 3011 Foundations of Respiratory Care
A-F only, 2 credit(s);
Instructor: King, Vanessa Lea
Description: Student may contact the instructor or department for information.

Resp 3101 Respiratory Care Modalities and Equipment I
A-F only, 4 credit(s);
Instructor: King, Vanessa Lea
Description: Student may contact the instructor or department for information.

Resp 3201 Cardiopulmonary Patient Assessment
A-F only, 4 credit(s);
Instructor: King, Vanessa Lea
Description: Student may contact the instructor or department for information.

Resp 3301 Clinical Practicum I
S-N only, 4 credit(s);
Instructor: King, Vanessa Lea
Description: Student may contact the instructor or department for information.

Resp 3401 Seminar in Respiratory Care I
A-F only, 1 credit(s);
Instructor: King, Vanessa Lea
Description: Student may contact the instructor or department for information.
Resp 4311 Advanced Perinatal and Pediatric Respiratory Care
  A-F only, 3 credit(s);
  Instructor: King, Vanessa Lea
  Description: Student may contact the instructor or department for information.

Resp 4321 Advanced Cardiopulmonary Diagnostics
  A-F only, 2 credit(s);
  Instructor: King, Vanessa Lea
  Description: Student may contact the instructor or department for information.

Resp 4331 Cardiopulmonary Rehabilitation, Disease Prevention and Case Management
  A-F only, 1 credit(s);
  Instructor: King, Vanessa Lea
  Description: Student may contact the instructor or department for information.

Resp 4341 Clinical Practicum III: Advanced Respiratory Care
  S-N only, 3 credit(s);
  Instructor: King, Vanessa Lea
  Description: Student may contact the instructor or department for information.

Resp 4401 Clinical Practicum IV: Advanced Adult Respiratory Critical Care
  A-F only, 1 credit(s);
  Instructor: King, Vanessa Lea
  Description: Student may contact the instructor or department for information.

Resp 4501 Research Project I
  A-F only, 1 credit(s);
  Instructor: King, Vanessa Lea
  Description: Student may contact the instructor or department for information.

Retail Merchandising 240 McNeal Hall

RM 1201 Fashion, Ethics, and Consumption
  A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics
  Instructor: Jedlicka, Erin Alicia
  Description: Student may contact the instructor or department for information.

RM 2196 Work Experience in Retail Merchandising
  S-N only, 1-4 credit(s), max credits 8;
  Instructor: Wu, Juanjuan
  Description: Student may contact the instructor or department for information.

RM 2215 Multichannel Retailing
  A-F only, 3 credit(s);
  Instructor: Kim, Angella J
  Description: Student may contact the instructor or department for information.
RM 3201 Career and Internship Preparation for Retail Merchandising
A-F only, 1 credit(s);
Instructor: Rechtzigel, Dana Lee
Description: Student may contact the instructor or department for information.

RM 3242 Retail Buying
A-F only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: An overview of the merchandising principles and mathematics needed for retail planning, buying, and selling. Lectures in class will be very concept focused with problem examples. The instructor will explain concepts and the use of formulas and then have you work through practice problems assigned from your textbook. You should bring your textbook and a calculator to each class period.
Style: 60% Lecture, 10% Discussion, 10% Small Group Activities, 10% Guest Speakers, 10% Web Based.
Grading: 15% mid exam, 15% final exam, 10% quizzes, 30% additional semester exams, 30% problem solving.
Exam Format: Fill in the blank questions and math questions

RM 3243 Visual Merchandising
A-F only, 3 credit(s);
Instructor: Wu, Juanjuan
Description: Students will use Mockshop, a virtual 3D store modeling software package, to conceptualize and design store interior, layout, fixtures, lighting, signs, merchandising planograms based on an understanding of visual merchandising concepts, theories, planning, strategies, techniques, store image, and target market. Upon completion of this course, students should be able to: -- Understand visual merchandising concepts, theories, processes, and techniques in various retail environments. -- Create successful window displays for various businesses with an understanding of the store/business image and target market. -- Fluently integrate visual merchandising thinking and practice with a 3D software application and effectively communicate across disciplines using both verbal and computerized 3D visual vocabulary. -- Develop virtual retail stores that project store image, merchandise, target market, and promotional theme, using relevant software applications.

RM 4123 Living in a Consumer Society
A-F only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: Student may contact the instructor or department for information.

RM 4160H Honors Capstone Project
A-F only, 2 credit(s);
Instructor: Johnson PhD, Kim KP
Description: Student may contact the instructor or department for information.

RM 4160H Honors Capstone Project
A-F only, 2 credit(s);
Instructor: Wu, Juanjuan
Description: Student may contact the instructor or department for information.

RM 4160H Honors Capstone Project
A-F only, 2 credit(s);
Instructor: Kim, Hye-Young
Description: Student may contact the instructor or department for information.

RM 4193 Directed Study in Retail Merchandising
A-F only, 1-4 credit(s), max credits 8;
Instructor: Johnson PhD, Kim KP
Description: Student may contact the instructor or department for information.

RM 4193 Directed Study in Retail Merchandising
A-F only, 1-4 credit(s), max credits 8;
Instructor: Wu, Juanjuan
Description: Student may contact the instructor or department for information.
RM 4193 Directed Study in Retail Merchandising
   A-F only, 1-4 credit(s), max credits 8;
   Instructor: Kim, Hye-Young
   Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
   S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent. Credit will not be granted if credit has been received for: ADES 4196;
   Instructor: Wu, Juanjuan
   Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
   S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent. Credit will not be granted if credit has been received for: ADES 4196;
   Instructor: Kim, Hye-Young
   Description: Student may contact the instructor or department for information.

RM 4216 Retail Promotion and Consumer Decision Making
   A-F only, 4 credit(s); 2215, [jr or sr or grad student], [DHA major or minor or instr consent] Credit will not be granted if credit has been received for: APST 5216;
   Instructor: Im, Hyunjoo
   Description: Student may contact the instructor or department for information.

**Russian  320 Folwell Hall**

Russ 1101 Beginning Russian I
   5 credit(s); Credit will not be granted if credit has been received for: RUSS 4101;
   Instructor: STAFF
   Description: The beginning Russian course develops the four basic language skills--speaking, understanding, reading, and writing--in a balanced, highly integrated manner. Students do regularly assigned grammar exercises, listen to CD's, and are required to participate in each class section. Active control of Russian structure is the principal criterion of evaluation.
   Style: 30% Lecture. instructor guided oral exercises
   Grading: 25% final exam, 70% quizzes, 5% other evaluation. oral exam
   Exam Format: fill in, translation to Russian, open-ended response

Russ 1101 Beginning Russian I
   5 credit(s); Credit will not be granted if credit has been received for: RUSS 4101;
   Instructor: Williams, Denise Elizabeth
   Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. This course is the first in a two-course sequence on Beginning Russian. Upon completion of the two courses, a student can expect to be able to pronounce Russian words with reasonable correctness; compose grammatically correct, simple, sentences; understand Russian as spoken conversationally; respond appropriately to common requests; and read everyday Russian with the aid of a dictionary. In order to speak Russian effectively, you would need to get practice speaking Russian with others.
   Style: This is a printed correspondence section.
   Grading: 20% mid exam, 30% final exam, 50% written homework.
   Exam Format: Supervised, in-person exams

Russ 1101 Beginning Russian I
   5 credit(s); Credit will not be granted if credit has been received for: RUSS 4101;
   Instructor: Jahn, Gary R
   Description: See the course URL

Russ 1102 Beginning Russian II
   5 credit(s); 1101 or equiv Credit will not be granted if credit has been received for: RUSS 4102;
Instructor: Williams, Denise Elizabeth  
**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit “Class URL” for ODL policies, including fee and financial aid restrictions. This course is the second in a two-course sequence on Beginning Russian. Upon completion of the two courses, a diligent student can expect to be able to pronounce Russian words with reasonable correctness; compose grammatically correct sentences; understand Russian as spoken conversationally; respond appropriately, if briefly, to common requests; and read everyday Russian with the aid of a dictionary. In order to speak Russian effectively, you would need to get practice speaking Russian with others.  
**Style:** This is a printed correspondence section.  
**Grading:** 20% mid exam, 30% final exam, 50% written homework.  
**Exam Format:** Supervised, in-person exams

**Russ 3001 Intermediate Russian I**  
5 credit(s); 1102 or instr consent  
**Credit will not be granted if credit has been received for:** RUSS 4103;  
**Instructor:** STAFF  
**Description:** This course continues the development of the four basic language skills -- speaking, understanding, reading, and writing. Students prepare regularly assigned written exercises, listen to CD's and videos, work with computer instructional programs and participate in class activities. Active control of the language for communication in all modalities is the goal of instruction and the main criterion of evaluation.  
**Style:** 30% Lecture. Instructor guided oral activities  
**Grading:** 30% final exam, 60% quizzes, 10% class participation.  
**Exam Format:** fill in, translation to Russian, open-ended response.

**Russ 3101 Advanced Russian I**  
4 credit(s);  
**Instructor:** STAFF  
**Description:** General objectives: reviewing and in-depth studying of grammar; developing and improving oral and written skills; developing cultural sensitivity through the use of realia and contexts.  
**Style:** 20% Lecture, 50% Discussion. grammar exercises  
**Grading:** 20% mid exam, 30% final exam, 10% reports/papers, 20% quizzes, 10% in-class presentation, 10% class participation.  
**Exam Format:** fill-in-the-blank, short essay, translation from English to Russian, answering questions

**Russ 3311 Russian Major Project**  
A-F only, 3 credit(s); Advanced Russian major  
**Credit will not be granted if credit has been received for:** RUSS 3311H;  
**Instructor:** STAFF  
**Description:** This 3-credit course is designed for and required of all students majoring in Russian, except for Honors students (see Russ 3312). It consists of writing a research paper of no less than 20 typed double-spaced pages, under the guidance of two faculty members in the Russian program. Topics are chosen by students in consultation with their faculty advisors. Students have scheduled individual meetings with the advisors. The Director of Undergraduate Studies coordinates all projects, and students should consult her/him before signing up for the course. Projects should show evidence of original thinking, the ability to use secondary sources (critical and scholarly literature) appropriately, and the ability to analyze and present arguments effectively. Unacceptable projects include book reports, plot summaries, or translations. The project should be linked to the student's course work within the Russian major, i.e. the student should have some academic background in a particular area before undertaking to write a paper in that area. The language of the paper should be English. The paper should, however, present evidence of appropriate use of Russian-language sources.

**Russ 3311H Honors Major Project in Russian**  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed; Advanced Russian major  
**Credit will not be granted if credit has been received for:** RUSS 3311;  
**Instructor:** STAFF  
**Description:** This course is designed for and required of all Honors students majoring in Russian. It consists of writing a research paper of no less than 35 typed double-spaced pages, under the guidance of two faculty members in the Russian program. Candidates for summa cum laude need three faculty readers, one of who should be outside the Russian department. Topics are chosen by students in consultation with their faculty advisors. Students have scheduled individual meetings with the advisors. The Director of Undergraduate Studies coordinates all projects, and students should consult her/him before signing up for the course. Projects should show evidence of original thinking, the ability to analyze, and to present arguments effectively. Unacceptable projects include book reports, plot summaries, or translations. The project should, in some way, be linked to the student's course work within the Russian major, i.e., the student should have some academic background in a particular area of study before undertaking to write a paper in that area. The language of the paper should be English. The paper should present evidence of appropriate use of Russian-language sources.
Russ 4101 Beginning Russian I  
3 credit(s);Fourth sem course in another language or grad studentCredit will not be granted if credit has been received for: RUSS 1101;

Russ 3993 Directed Studies  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: STAFF  
Description: The purpose of this course, offered at the discretion of the faculty, is to provide individualized instruction to undergraduate students wishing to explore specialized topics not covered in regular course offerings. The number of faculty in the Russian program being small, no more than 3-5 students per year can be thus accommodated; preference is given to students in the final year of completing their Russian major. The content and procedures of this course vary widely, depending upon agreement between student and instructor, and the number of credits for which the course is taken. Students must consult the Director of Undergraduate Studies in the Russian unit before registering for this course.

Russ 4101 Beginning Russian I  
3 credit(s);Fourth sem course in another language or grad studentCredit will not be granted if credit has been received for: RUSS 1101;
Russ 4101 Beginning Russian I
3 credit(s); Fourth sem course in another language or grad student
Credit will not be granted if credit has been received for: RUSS 1101;
Instructor: Schweikert, Maria S
Description: Please see Fall 2010

Russ 4101 Beginning Russian I
3 credit(s); Fourth sem course in another language or grad student
Credit will not be granted if credit has been received for: RUSS 1101;
Instructor: Walter, Ronald F.
Description:

Russ 4103 Intermediate Russian I
3 credit(s); 4102, [fourth sem course in another language or grad student]
Credit will not be granted if credit has been received for: RUSS 3001;
Instructor: Jahn, Gary R
Description: See the course URL

Russ 4103 Intermediate Russian I
3 credit(s); 4102, [fourth sem course in another language or grad student]
Credit will not be granted if credit has been received for: RUSS 3001;
Instructor: Polakiewicz, Leonard Anthony
Description: Student may contact the instructor or department for information.

Russ 5421 Literature: Middle Ages to Dostoevsky in Translation
3 credit(s); Credit will not be granted if credit has been received for: RUSS 3421;
Instructor: Jahn, Gary R
Description: This is an historical survey of the development of Russian literature from its origins in the tenth century until the onset of the most celebrated period in Russian literary history, that of Realism, in the middle of the 19th century. The course consists of a combination of lecture and class discussions. Students will read a representative sampling of works from various periods. These will include selections from Old Russian Literature (chronicle accounts, hagiographic works, "The Life of Archpriest Avvakum", and others) and from the literature of the 18th century (selections from Lomonosov, Sumarokov, and Karamzin). Approximately three-fifths of the course will be devoted to the literature of the first half of the 19th century. Students will read works by Pushkin, Gogol, Dostoevsky, and Turgenev. All told, required reading amounts to approximately 500-600 pages. Grades in this course are based upon performance on the mid-term and final examinations, on contributions to class discussion, and on the quality of the term paper. The term paper is NOT required for those enrolled in Russian 3421 but required of those enrolled in Russian 5421.
Style: 50% Lecture, 50% Discussion.
Grading: 30% mid exam, 50% final exam, 20% class participation.

Russ 5993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF
Description: The purpose of this course, offered at the discretion of the faculty, is to provide individualized instruction to advanced undergraduate and graduate students wishing to explore specialized topics not covered in regular course offerings. The number of faculty in the Russian program being small, no more than 3-5 students per year can be thus accommodated, preference is given to students in their final year of the Russian major and to graduate students in Russian Area Studies. The content and procedures of this course vary widely, depending upon agreement between student and instructor, and the number of credits for which the course is taken. Students must consult the Director of Undergraduate Studies in the Russian unit before registering for this course.
Style: guided research and discussion
Grading: 100% other evaluation. student's work evaluated on the basis of variable course criteria

Scandinavian
320 Folwell Hall

Scan 3011W Readings in Scandinavian Languages
4 credit(s); [Dan or Nor or Swed][1004 or 4004] or instr consent
Credit will not be granted if credit has been received for: SCAN
University of Minnesota - Course Guide For Twin Cities Campus - Fall 2012

**Course: 4011; Meets CLE req of Writing Intensive**
**Instructor:** Zmijewska-Emerson, Hanna

**Description:** The purpose of the Scandinavian 3011 class is to help you improve your reading and writing skills in your primary Scandinavian language and to build a reading knowledge of the other Scandinavian languages. We will read and screen various texts in Swedish, Norwegian and Danish, discuss and analyze them, both as a whole class and in smaller groups. You will also write journal entries and short assigned writings, do several in class presentations, and research, revise and polish a 5-6 page semester paper in your primary Scandinavian language. Writing is an integral part of this course with the purpose of articulating your thoughts on the course material. Among the topics and genres the texts in this course will explore are multi-ethnic and multicultural identity, globalization, social satire, crime fiction, news events of the moment, and currents in life, culture and society in contemporary Denmark, Norway and Sweden. Special emphasis will be given to teaching of difficult grammar structures and appropriate vocabulary for articulating thoughts on the given topics. The assignments will be written in your primary Scandinavian language but will explore a topic related to one of the two other Scandinavian countries.

**Grading:** 15% mid exam, 15% final exam, 33% reports/papers, 25% additional semester exams, 12% in-class presentation.

**Course: Scan 3602 The Literary Fairy Tale in Scandinavia**
**Instructor:** Zagar, Monika

**Description:** In this course for undergraduates, the Scandinavian literary fairy tale (in English translation) will be examined as a body of literature which originated, essentially, from folk tales and German Romanticism. Emphasis will be on Scandinavian innovations of the fairy tale genre and its tradition, especially the 19th century tales and stories by Hans Christian Andersen. While attention will be given to older authors preceding Andersen (such as Perrault and Grimm), the emphasis in the second part of the course will be creative responses to and revitalization of the genre by authors during the 20th century. These innovative authors include: Henrik Pontoppidan, Isak Dinesen, Astrid Lindgren, Villy Sorensen, Svava Jakobsdottir, and Walt Disney. Secondary texts will include articles by notable scholars of fairytales, for instance by Jack Zipes, Thomas Bredsdorf, Niels Ingwersen, and others. The course will develop students’ analytical skills in dealing with one of the world's most important bodies of fairy tales and stories. Different literary theories and reading strategies will be applied to specific texts in order to further students' understanding of the art and cultural significance of this type of literature for children and adults. Both national and international dimensions of the material will be considered, and both historical and topical aspects of fairy tales in Scandinavian (and American) culture will be reviewed. Several videos will be included.

**Style:** 40% Lecture, 50% Discussion. viewing of films

**Grading:** 30% final exam, 50% reports/papers, 20% class participation.

**Exam Format:** essay form exam

**Course: Scan 3634 Scandinavian Women Writers**
**Instructor:** Zagar, Monika

**Description:** Scandinavian Women Writers and the Emancipation Many of Scandinavia's most important writers have engaged in issues of sexual difference and women's emancipation. The aim of this course is to reflect the discussion of women's emancipation through literary texts, and to discuss the intertwining of progressive thought and literary representation. The concept of emancipation is to be understood in a broad sense: some of these writers demanded political authority and social rights while others were focused on personal and/or sexual freedom. The works were chosen because of their literary qualities and their progressive ideas. We will focus on some major women authors, and a couple of male ones, from the 19th century to the present. The course is limited to texts that have been translated into English. Students of Scandinavian will have the possibility to read in the original languages as well. Writers included in the course are: Camilla Collett, Amalie Skram, Selma Lagerlof, Knut Hamsun, Ellen Key, Edith Sodergran, Moa Martinson, Karen Blixen, Kerstin Ekman, Svava Jakobsdottir, Rosa Liksom. This course is designed for undergraduate students in Scandinavian Literature, Gender Studies and Comparative Literature. Class Time: 60% lecture, 40% discussion.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 25% mid exam, 30% final exam, 30% reports/papers, 15% class participation.

**Exam Format:** Essay-type questions.

**Course: Scan 3993 Directed Studies**
**Instructor:** STAFF

**Description:** Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

**Course: Scan 4011 Readings in Scandinavian Languages**
2 credit(s); Grad student credit will not be granted if credit has been received for: SCAN 3011W;
Instructor: Zmijewska-Emerson, Hanna
Description: Student may contact the instructor or department for information.

Scan 5634 Scandinavian Women Writers
3 credit(s); Credit will not be granted if credit has been received for: SCAN 3634; Meets CLE req of Global Perspectives
Instructor: Zagar, Monika
Description: Student may contact the instructor or department for information.

Scan 5701 Old Norse Language and Literature
3 credit(s);
Instructor: Grimstad, Kaaren E
Description: This course is devoted to developing an understanding of the grammatical structure and acquiring a reading knowledge of Old Norse by reading texts. Translation techniques include both close reading of texts with parsing and rapid reading for content only. The target audience is broad: upper level undergraduates and graduates, both majors and non-majors. It is helpful if the student has some knowledge of another language, especially one with a complex grammar structure such as Latin or German.
Style: translation of texts
Grading: 100% quizzes.
Exam Format: passage to be translated with questions on grammar

Scan 5993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

Scientific Computation 6-145 Jackson Hall

SciC 8190 Supercomputer Research Seminar
1 credit(s), max credits 3, 3 completions allowed;
Instructor: Wentzcvitch, Renata M
Description: Student may contact the instructor or department for information.

Second Language Studies 214 Nolte Center

SLS 3001W Basics in Teaching English as a Second Language
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: SLS 3001W is a four-credit liberal education course that combines a service learning internship with classroom lectures, discussions, group work, and experiential activities to introduce students to theoretical and conceptual foundations of language pedagogy and prepare students for teaching ESL in post-secondary or community programs. The course is writing intensive and also requires students to actively participate in discussions, reflect on their internship experiences, and produce written reports and oral presentations that demonstrate their developing understanding of core issues in the field of TESL. As a liberal education core course, SLS 3001W expects students to learn concepts and theories available to the field, but also to critically evaluate the evidence supporting different theoretical stances. Rather than looking for the right answer, you should consider a variety of perspectives and weight their strengths and weaknesses. Throughout the semester in our discussion, class work, projects, reflective journals, and presentations, remember that an important part of your development as a second language professional is to be able to consider all of the aspects of language teaching - teacher role, student role, pedagogical theories and methods, student learning background, learning environment, the role of culture, etc. - in order to begin to make good decisions in the classroom.
Style: 30% Lecture, 40% Discussion, 30% Laboratory.
Grading: 25% reports/papers, 25% quizzes, 5% attendance, 15% reflection paper, 5% in-class presentation, 25% other evaluation. Other evaluation: 10% Swap shop presentations (2), 15% Internship
Exam Format: Short answer, essay

SLS 3401 Introduction to Pronunciation and Grammar for ESL Teachers
A-F only, 4 credit(s);
Instructor: STAFF
Description: SLS 3401 introduces English language analysis with key concepts and theories in (a) the English pronunciation system, and (b) English grammar. Rather than providing an exhaustive treatment of these areas, the course will examine a number of issues within each and explore the way ESL textbooks and instructors advance ESL learners' language proficiency in these areas. The primary aim is to help you learn the foundations of these concepts, but more importantly, give you the language and techniques to teach these areas to second language learners. This course assumes no prior background in the study of English grammar or pronunciation, but the more experience you have had working with second language learners, the more intuitive you will find the principles to be as you learn in this course. Course activities are designed to develop your knowledge and skills to (a) help ESL/EFL learners use grammar and pronunciation as a resource to express meaning, (b) identify ESL/EFL learners' grammar and pronunciation errors, and (c) explain correct grammar and pronunciation forms in a practical and meaningful way. At the end of the course, you should be able to answer typical ESL learner questions and effectively address typical learner errors. Students should also gain a better understanding of best practices in regards to teaching and learning grammar and pronunciation in ESL/EFL contexts. The knowledge gained from this course should begin to prepare you for effective ESL/EFL instruction and more advanced study at the graduate level.

Style: 30% Lecture, 25% Discussion, 25% Small Group Activities, 20% Student Presentation.
Grading: 20% reports/papers, 30% quizzes, 5% attendance, 20% in-class presentation, 5% class participation, 20% other evaluation.

Other evaluation: curriculum development project

SLS 3501 Practical Language Learning for International Communication
3 credit(s);
Instructor: Cohen, Andrew David
Description: Going to study abroad to learn a new language and culture, or have you just returned from such an experience? What are your strengths as a language learner? This course is all about getting a better handle on language learning - having a better sense of your own learning style preferences and language strategy preferences for a given language-learning or language-use task. During the course, you also explore your motivation to learn languages in general and a given language in particular, and your motivation to do specific language tasks. Ideally, the course not only makes you more aware of yourself as a language learner, but also enhances your ability to succeed at learning and using languages now and in the future, at home and abroad. The objectives of the course are: (1) to provide you a better sense of what it means to learn a new language, (2) to engage you fully in diagnosing your own learning style preferences, language strategy repertoire, culture learning strategies, and motivation when performing language tasks (through completion of a series of inventories), (3) to have you conduct empirical data collection with three language learners of you choosing, as a means of improving your ability to diagnose others' language learning abilities, practices, and potential, and (4) to have you participate in a series of classroom exercises intended to simulate real language learning and performance situations, and to have you reflect in pairs, in small groups, and in whole-class discussions regarding what you have gained from these activities. The topics include: (a) second language (L2) learning: popular ideas, explaining the process, describing learner language, and individual differences in L2 learning, (b) learning styles, (c) language learner strategies, (d) cultural values and culture. (e) strategies in the language skill areas: listening, speaking, reading, writing, grammar learning, vocabulary, translation, and nonverbal communication, (f) describing approaches to L2 teaching and learning in the classroom, and (g) revisiting popular ideas about L2 language learning. Maximum of 50 students; presentations by the instructor, TA, and students, discussion, interactive exercises, extensive small group work, and use of WebVista. Lightbown, P. M. & Spada, N. 2006. How languages are learned. (2ND ed.) Oxford: Oxford Univ. Press. Paige, R. M., Cohen, A. D., Kappler, B., Chi, J. C., & Lasségard, J. P. (2006). Maximizing Study Abroad: A Students' Guide to Strategies for Language and Culture Learning and Use. (2nd ed.) Minneapolis, MN: CARLA. Class sessions are 50% instructor presentations, 20% student presentations, 10% discussion, and 20% small-group activities. About 40-50 pages of reading per week, 20 pages of writing per semester. Written midterm project, 3 tests on course concepts, and a written final project, evidence of having read the assigned readings, and active participation in class discussions and exercises.

Style: 50% Lecture, 10% Discussion, 20% Small Group Activities, 20% Student Presentation. Group tasks, groups of 2-3 will lead a portion of the class sessions.
Grading: 50% reports/papers, 30% quizzes, 15% in-class presentation, 5% class participation.
Exam Format: Short-answer questions - on 3 quizzes, no exam.

SLS 5724 Intro to Language Assessment
A-F only, 3 credit(s);
Instructor: Cohen, Andrew David
Description: This course deals with the principles and practice of assessing second or foreign language (L2) learning by adults. This means that focus is on classroom assessment of adult ESL learners, as well as on assessment of learners of other languages. While the course has no prerequisites, it assumes that you have some familiarization with the field of second language teaching and learning. The real purpose of the course is for you to learn what tests are all about and to be encouraged to want to construct and use them when needed, and with benefit to the learners and to you as teacher if you are in that role. SPECIFIC GOALS OF THE COURSE To keep a balance between the course instructors as provider of information and the students in this course as individuals engaged in productive self-discovery: selective presentations by the instructor dealing with issues such as: a distinctive-feature analysis of test items, the strategies used in responding to test items and procedures, creative ways to assess learners' performance in L2 pragmatics, graduate-student presentations on nine selected topics (see below),with assistance from undergrads, scrutiny of test items and tests,
group work during class exercises, collaborative student test-construction projects. For you as a test user: to become a more critical consumer of L2 measures, to identify and select assessment procedures appropriate for a given purpose, tapping the desired skills, for learners at the given ability level. For you as a test constructor: to learn how to write more effective test items and tasks for measuring both global ability and ability in specific skill and language-content areas, to tackle head on the challenge of making test taking truly a positive, beneficial, and even fun experience for language learners - e.g., by: making the assessment process engaging enough so that learners have a genuine incentive to review the material, providing useful feedback to learners as to what they know and don't know, providing for the instructor (you or someone else) knowledge as to what has been learned and what hasn't. To make you more aware of the strategies that learners use in responding to a test, with an eye to test validity. To demystify and harness some basic statistical concepts, making use of a test analysis program, Lertap 5. To have the assigned readings reinforced both by pre-reading questions and by student-generated questions as well. Course activities: - Reading sections of a popular textbook on the topic by Doug Brown, - Reading selected writings of language assessment experts, - Doing a series of tasks involving assessment measures, - Constructing and evaluating a language assessment measure collaboratively, with the final term paper being a write up of the project results.

**Style:** 20% Lecture, 20% Discussion, 20% Small Group Activities, 30% Student Presentation, 10% Web Based.

**Grading:** 30% reports/papers, 25% written homework, 10% attendance, 15% in-class presentation, 10% class participation, 10% other evaluation.

### SLS 5805 Basics of Second Language Acquisition for Teachers

- **3 credit(s);**
- **Instructor:** Tarone, Elaine E
- **Description:** A considerable amount of research exists on the cognitive and social processes involved in acquiring proficiency in a secondary language. In this course, we will review the basic findings of research on secondary language acquisition (SLA), and examine video clips with samples of learner language generated by learners of English, Chinese, Japanese, Korean and Persian/Farsi. You will learn basic tools to analyze the characteristics of their learner language, and we will reflect on implications of our analyses, both for SLA theory and for pedagogy. You will carry out a case study of one language learner.
- **Style:** 15% Lecture, 25% Film/Video, 25% Discussion, 35% Laboratory.
- **Grading:** 40% special projects, 60% laboratory evaluation.
- **Exam Format:** You will be asked to analyze learner language data using the tools we have practiced; you will write up your analysis in a short essay.

### SLS 5993 Directed Studies

- **1-4 credit(s), max credits 9, 9 completions allowed;**
- **Instructor:** Cohen, Andrew David
- **Description:** Student may contact the instructor or department for information.

### Security Technologies

- **West Bank Office Building**

### ST 8111 Methods, Theory, and Applications

- **A-F only, 2 credit(s);**
- **Instructor:** Isle, Brian Archer
- **Description:** Student may contact the instructor or department for information.

### ST 8112 Technology for Homeland Security

- **A-F only, 2 credit(s);**
- **Instructor:** Polla, Dennis L
- **Description:** Student may contact the instructor or department for information.

### ST 8200 Special Topics in Security Technologies

- **A-F only, 0.5 credit(s);**
- **Instructor:** Isle, Brian Archer
- **Description:** Student may contact the instructor or department for information.

### ST 8221 Communications of Risk and Security
A-F only, 1 credit(s);
Instructor: Laingen, Charles Winslo
Description: Student may contact the instructor or department for information.

ST 8331 Dynamic Systems Modeling and Simulation Tools
A-F only, 2 credit(s);
Instructor: Kircher, Amy
Description: Student may contact the instructor or department for information.

ST 8441 Internship (optional)
A-F only, 0.5 credit(s), max credits 1;
Instructor: Isle, Brian Archer
Description: Student may contact the instructor or department for information.

ST 8511 Public Policy
A-F only, 1 credit(s);
Instructor: Kelley, Steve
Description: Student may contact the instructor or department for information.

Social Work 105 Peters Hall

SW 1905 Freshman Seminar: Images of Youth
2 credit(s), max credits 6;
Instructor: Baizerman, Michael Leon
Description: A course on "images of youth" can be about the many actual and possible representations of young people. As such, a course would examine a variety of notions about youth, the actual persons and "youth" the representation. Examination could be about the personal, social, and cultural spaces between actual (young) persons and their images and other representations, and how these vary (or not) by historical period, social arena, "true self", ethnicity/race, geography, social class, sex/gender, language, and the like. Attention could be given to how these representations are (are not) embedded in larger reticula of scientific and lay theories of these people, their "stage of life", what is "natural" about their being as they are and doing as they do and what is "essential" (and/or the essence) of their person(hood) and of the images which portray them in the popular media, in scientific theories, in novels, films and plays, and in music, poetry, and art, for instance. This seminar will explore some of these and some other related themes in pursuit of responses to the focal questions of this course: How are youth portrayed in a variety of media; how are they represented, and what are some images of youth which seem to guide our collective and individual responses to real world, everyday-life youth, and how are these images used by young people and adults to fashion their multiple identities in everyday life and in the reflective, personal self. In the University, "youth" is a subject (and object) "owned" by many academic disciplines and professions, and there can be (and is) disagreement between and among these about "the true nature" of these persons, the best ways to "enhance their healthy development" and to facilitate their "growing up" and "coming of age", and their place(s) within family, neighborhood, community, and nation. That is, "youth" is "contested terrain" and the vocabulary and rhetorics of this ongoing, but always changing (somewhat) "youth discourse" will also be a focus of this course. Framed thus, it is clear that there are a vast array of traditional disciplines and professions contributing theories, concepts and images to our subject. Any one of these can invite life-long inquiry and many will be new to you. That's inevitable and fine, because while you are experts in how you did (are doing) your youth, you are not expected to be so on the many ways you are represented in our culture and society. Indeed, that's why we are together in this Seminar - to explore and try to understand how (and why) youth are portrayed as they are. By the end of our work together, we both will have a better grasp of the issues, questions, responses, and answers.
Style: 30% Lecture, 10% Film/Video, 40% Discussion. 20% Field Visits.
Grading: Grading is finalized after negotiated assignments/papers.

SW 2501W Introduction to Social Justice
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Albrecht, Lisa D
Description: This course is the first of three required courses that are part of the new interdisciplinary, cross-college undergraduate minor in Social Justice. In this course, we will focus on the meanings of social justice by looking at three key socio-political areas of study: globalization, criminal justice and social welfare. We will also look at how various activists from these arenas work for social change, and finally we will engage in community-based education (service learning) where we will volunteer in social justice organizations locally. Given the dilemmas we face on this planet regarding our survival as culturally diverse people, social justice is a fitting subject for us to explore. As we become more proficient analytical thinkers and writers, perhaps we will also become more knowledgeable citizens, more competent communicators, and people who can make the world a better place for all human beings. Living in a democracy means that we, as citizens, have a great deal of responsibility. By looking at the meanings of social justice and
at how different people and organizations work for social justice, we will explore how activism is deeply connected to citizenship and democracy. Another major goal of this course is to create a community of learners in our classroom. In forming this environment, students should be prepared to be active in class. Since this is not a lecture class, we will spend most of our classroom time together talking with each other. Listening to each other, and learning to give constructive feedback will allow our community to flourish, and will give each of us individually new perspectives on our own writing and thinking processes. The course is planned carefully, especially the community based learning experiences. Please don't fall behind; the sequence of readings and activities are meant to be done in the order I've assigned them.

SW 2501W Introduction to Social Justice

A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Fisher, Colleen

Description: This course is the first of three required courses that are part of the new interdisciplinary, cross-college undergraduate minor in Social Justice. In this course, we will focus on the meanings of social justice by looking at three key socio-political areas of study: globalization, criminal justice and social welfare. We will also look at how various activists from these arenas work for social change, and finally we will engage in community-based education (service learning) where we will volunteer in social justice organizations locally. Given the dilemmas we face on this planet regarding our survival as culturally diverse people, social justice is a fitting subject for us to explore. As we become more proficient analytical thinkers and writers, perhaps we will also become more knowledgeable citizens, more competent communicators, and people who can make the world a better place for all human beings. Living in a democracy means that we, as citizens, have a great deal of responsibility. By looking at the meanings of social justice and at how different people and organizations work for social justice, we will explore how activism is deeply connected to citizenship and democracy. Another major goal of this course is to create a community of learners in our classroom. In forming this environment, students should be prepared to be active in class. Since this is not a lecture class, we will spend most of our classroom time together talking with each other. Listening to each other, and learning to give constructive feedback will allow our community to flourish, and will give each of us individually new perspectives on our own writing and thinking processes. The course is planned carefully, especially the community based learning experiences. Please don't fall behind; the sequence of readings and activities are meant to be done in the order I've assigned them.

Style: 25% Discussion, 25% Small Group Activities, 25% Student Presentation, 15% Service Learning.
Grading: 15% mid exam, 15% final exam, 20% special projects, 20% reflection paper, 15% class participation, 15% other evaluation. Other Evaluation: service learning.
Exam Format: Take-home.

SW 3501 Theories and Practices of Social Change Organizing

A-F only, 4 credit(s);
Instructor: Albrecht, Lisa D

Description: In this course, we will look at various 20th and 21st century social change movements to study how activists & organizers work for social change. Examples: immigrant rights, environmental justice, reproductive justice, GLBT rights, etc. We also read texts about how to work for social justice. We will engage in 30 hours of community-based education (service learning) where we will volunteer in social justice organizations locally. Be prepared to be active in class. Since this is not a lecture class, we will spend most of our time together talking with each other. Students co-lead class, do a group project after reading a book related to a social movement, write about community-based learning experiences & complete a final project. The course is planned carefully, Please don't fall behind; the sequence of readings and activities are meant to be done in the order I've assigned them.

Style: 25% Lecture, 25% Discussion, 25% Small Group Activities, 25% Student Presentation, 15% Service Learning.
Grading: 35% special projects, 20% reflection paper, 30% class participation, 15% other evaluation. Other Evaluation: service learning.

SW 3701 Introduction to Child Maltreatment: Intervention and Prevention

3 credit(s);
Instructor: STAFF

Description: This course is designed as an introduction to the study of family violence across the lifespan. It will introduce students to history, current theories, research, and policies in the areas of child maltreatment and the larger domain of family violence. The content of the course focuses on current theories, research and policies on violence against women (battering, sexual assault, stalking), child maltreatment (physical and sexual abuse, emotional abuse, neglect) and abuse of vulnerable adults (elderly, non-elderly vulnerable populations). This course is an introduction to the topic. It will give students a basic overview of the issues across types of family violence intervention and prevention and how societies have responded through public policy. The course will also integrate issues of gender, race, culture, age, physical ability, and sexual orientation throughout our examination of these topics. This course is designed to meet the social science diversified core requirement of the University's Liberal Education Requirement. There are no prerequisites for this course, it is open to all undergraduates and serves as the first required course in the Family Violence Prevention Minor. Other required courses in the Minor cover prevention, intervention and gender violence in global perspectives. As such, this course will emphasize theories, research and policies with a focus on family violence against child and adults in North America.

Style: 25% Lecture, 10% Film/Video, 25% Discussion, 10% Demonstration, 10% Field Trips, 20% Guest Speakers.
**Grading:** 15% mid exam, 20% final exam, 10% special projects, 20% written homework, 15% reflection paper, 20% class participation. Written Homework=online assignments.

**SW 3702 Introduction to Adult Intimate Partner Violence: Intervention and Prevention**

3 credit(s);  
**Instructor:** STAFF  
**Description:** This course is designed as an introduction to the study of Intimate Partner Violence (IPV) in the adult population. It will introduce students to current theories, research, and prevention practice in the area of family violence. The course focuses on the intervention and prevention of intimate partner violence, including preventing violence against women (battering, sexual assault, stalking) and abuse of vulnerable adults (elderly, non-elderly vulnerable populations) within the United States. A major emphasis in this course will be on prevention of adult IPV and social interventions aimed at ending violence in families once it occurs. This includes direct work with victims of abuse, assailants, and their families as well as community-level and policy interventions. The course will also integrate issues of gender, race, culture, age, physical ability, socio-economic status, and sexual orientation throughout our examination of these topics. This course is open to all undergraduates and serves as a required course in the Family Violence Prevention Minor. Because other required courses in the Minor cover child maltreatment and gender violence in global perspectives, this course will emphasize prevention and intervention practices with a focus on family violence against adults in North America.  
**Style:** 15% Lecture, 15% Film/Video, 20% Discussion, 20% Small Group Activities, 5% Student Presentation, 10% Guest Speakers, 15% Service Learning.  
**Grading:** 25% reports/papers, 10% special projects, 30% reflection paper, 10% in-class presentation, 5% class participation. 20% is Service Learning.

**SW 3703 Gender Violence in Global Perspective**

3 credit(s);  
**Instructor:** STAFF  
**Description:** This course examines gender violence in its multiple forms from a global perspective. An introduction to the history of violence against women, current theories and research on the causes of violence in intimate relationships, past and current responses, and interventions and prevention models to address this worldwide problem will be discussed. Understanding the multiple approaches for addressing gender violence will provide students the knowledge to describe culturally competent intervention and prevention strategies.  
**Style:** 20% Film/Video, 25% Discussion, 15% Small Group Activities, 15% Field Trips, 25% Guest Speakers.  
**Grading:** 50% reports/papers, 25% attendance, 25% reflection paper.

**SW 5051 Human Behavior and the Social Environment**

A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
**Instructor:** Kim,JaeRan  
**Description:** Student may contact the instructor or department for information.

**SW 5051 Human Behavior and the Social Environment**

A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
**Instructor:** Kivnick,Helen Quintessa  
**Description:** Student may contact the instructor or department for information.

**SW 5801 Policies and Programs in American Social Welfare**

A-F only, 2 credit(s);  
**Instructor:** Morrissey,Megan Harrison  
**Description:** Student may contact the instructor or department for information.

**SW 5907 School Social Work**

1 credit(s);  
**Instructor:** Lowry,Kathleen Mary  
**Description:** Student may contact the instructor or department for information.

**SW 8010 Seminar: Field Practicum I**

S-N only, 1-8 credit(s), max credits 8;  
**Instructor:** Perrin,Dave  
**Description:** Student may contact the instructor or department for information.
**SW 8010 Seminar: Field Practicum I**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Morcomb, Denise Charlotte
- **Description**: Student may contact the instructor or department for information.

**SW 8010 Seminar: Field Practicum I**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Maxwell, Steve
- **Description**: Student may contact the instructor or department for information.

**SW 8010 Seminar: Field Practicum I**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Gilbert, MJ
- **Description**: Student may contact the instructor or department for information.

**SW 8010 Seminar: Field Practicum I**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Presslein MSW, LICSW, Heidi M.
- **Description**: Student may contact the instructor or department for information.

**SW 8010 Seminar: Field Practicum I**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Gensheimer, Linda Christine
- **Description**: Student may contact the instructor or department for information.

**SW 8020 Field Practicum II**
- **S-N only, 1-6 credit(s), max credits 6**;
- **Instructor**: Morcomb, Denise Charlotte
- **Description**: Student may contact the instructor or department for information.

**SW 8020 Field Practicum II**
- **S-N only, 1-6 credit(s), max credits 6**;
- **Instructor**: Maxwell, Steve
- **Description**: Student may contact the instructor or department for information.

**SW 8020 Field Practicum II**
- **S-N only, 1-6 credit(s), max credits 6**;
- **Instructor**: Gilbert, MJ
- **Description**: Student may contact the instructor or department for information.

**SW 8020 Field Practicum II**
- **S-N only, 1-6 credit(s), max credits 6**;
- **Instructor**: Presslein MSW, LICSW, Heidi M.
- **Description**: Student may contact the instructor or department for information.

**SW 8020 Field Practicum II**
- **S-N only, 1-6 credit(s), max credits 6**;
- **Instructor**: Walthour, Kate Ann
- **Description**: Student may contact the instructor or department for information.

**SW 8030 Advanced Standing Social Work Practicum**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Perrin, Dave
- **Description**: Student may contact the instructor or department for information.

**SW 8030 Advanced Standing Social Work Practicum**
- **S-N only, 1-8 credit(s), max credits 8**;
- **Instructor**: Morcomb, Denise Charlotte
Description: Student may contact the instructor or department for information.

SW 8030 Advanced Standing Social Work Practicum
S-N only, 1-8 credit(s), max credits 8;
Instructor: Maxwell, Steve
Description: Student may contact the instructor or department for information.

SW 8030 Advanced Standing Social Work Practicum
S-N only, 1-8 credit(s), max credits 8;
Instructor: Gilbert, MJ
Description: Student may contact the instructor or department for information.

SW 8030 Advanced Standing Social Work Practicum
S-N only, 1-8 credit(s), max credits 8;
Instructor: Presslein MSW, LICSW, Heidi M.
Description: Student may contact the instructor or department for information.

SW 8030 Advanced Standing Social Work Practicum
S-N only, 1-8 credit(s), max credits 8;
Instructor: Gensheimer, Linda Christine
Description: Student may contact the instructor or department for information.

SW 8041 Specialized Field Placement
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Maxwell, Steve
Description: Student may contact the instructor or department for information.

SW 8151 Social Work Methods: Practice With Individuals and Systems
A-F only, 2 credit(s);
Instructor: Dimock, Peter Trier
Description: Student may contact the instructor or department for information.

SW 8151 Social Work Methods: Practice With Individuals and Systems
A-F only, 2 credit(s);
Instructor: Rooney, Ronald H
Description: Student may contact the instructor or department for information.

SW 8151 Social Work Methods: Practice With Individuals and Systems
A-F only, 2 credit(s);
Instructor: Gonzalez, Christina Marie
Description: Student may contact the instructor or department for information.

SW 8152 Social Work Practice Methods: Families and Groups
A-F only, 2 credit(s);
Instructor: Bidwell PhD, Laurel
Description: Student may contact the instructor or department for information.

SW 8152 Social Work Practice Methods: Families and Groups
A-F only, 2 credit(s);
Instructor: Carlson, Juliana M
Description: Student may contact the instructor or department for information.

SW 8152 Social Work Practice Methods: Families and Groups
A-F only, 2 credit(s);
Instructor: Kiesel, Lisa R
Description: Student may contact the instructor or department for information.
SW 8153 Models of Community Intervention
   A-F only, 1 credit(s);
   Instructor: Reinardy, James Robert
   Description: Student may contact the instructor or department for information.

SW 8153 Models of Community Intervention
   A-F only, 1 credit(s);
   Instructor: Simmelink, Jennifer
   Description: Student may contact the instructor or department for information.

SW 8153 Models of Community Intervention
   A-F only, 1 credit(s);
   Instructor: Sugrue, Erin Patricia
   Description: Student may contact the instructor or department for information.

SW 8251 Social Work Practice in Health, Disabilities, and Aging
   A-F only, 4 credit(s);
   Instructor: Remke, Stacy S
   Description: Student may contact the instructor or department for information.

SW 8252 Advanced Interventions and Issues in Health, Disabilities, and Aging (HDA)
   A-F only, 2 credit(s);
   Instructor: Remke, Stacy S
   Description: Student may contact the instructor or department for information.

SW 8262 Empowerment Practice With Persons With Disabilities
   A-F only, 2 credit(s);
   Instructor: Lightfoot, Elizabeth Bradford
   Description: Student may contact the instructor or department for information.

SW 8351 Advanced Practice I: Families and Children
   A-F only, 4 credit(s);
   Instructor: Dodge, Liz M
   Description: Student may contact the instructor or department for information.

SW 8351 Advanced Practice I: Families and Children
   A-F only, 4 credit(s);
   Instructor: Rooney, Ronald H
   Description: Student may contact the instructor or department for information.

SW 8352 Advanced Practice II: Families and Children
   A-F only, 2 credit(s);
   Instructor: Wilcox, Carole
   Description: Student may contact the instructor or department for information.

SW 8361 Identification and Assessment of Family Violence
   A-F only, 2 credit(s);
   Instructor: Gilgun, Jane F
   Description: Student may contact the instructor or department for information.

SW 8362 Social Work Interventions With Families
   A-F only, 2 credit(s);
   Instructor: Hoy, Judith M
   Description: Student may contact the instructor or department for information.

SW 8451 Assessment and Engagement in Clinical Social Work Practice
   A-F only, 4 credit(s);
   Instructor: Aby, Martha Jane
Description: Student may contact the instructor or department for information.

SW 8451 Assessment and Engagement in Clinical Social Work Practice
A-F only, 4 credit(s);
Instructor: Stiber,Jill M
Description: Student may contact the instructor or department for information.

SW 8452 Core Concepts in Clinical Social Work Practice
A-F only, 2 credit(s);
Instructor: Shannon,Patricia Jean
Description: Student may contact the instructor or department for information.

SW 8461 Advanced Clinical Social Work Practice with Adults
A-F only, 2 credit(s);
Instructor: Stiber,Jill M
Description: Student may contact the instructor or department for information.

SW 8462 Advanced Clinical Practice With Children and Adolescents
A-F only, 2 credit(s);
Instructor: Gearity PhD, Anne R
Description: Student may contact the instructor or department for information.

SW 8463 Social Work Practice With Severe and Persistent Mental Illness and Severe Emotional Disturbance
A-F only, 2 credit(s);
Instructor: Childers, Paula Margaret
Description: Student may contact the instructor or department for information.

SW 8552 Advanced Community Practice: Leadership, Planning, and Program Development
A-F only, 2 credit(s);
Instructor: Long, Anne Little
Description: Student may contact the instructor or department for information.

SW 8561 Human Resources Management in Human Services Agencies
A-F only, 2 credit(s);
Instructor: Cain, Therese Marie
Description: Student may contact the instructor or department for information.

SW 8602 Direct Practice Evaluation
A-F only, 2 credit(s);
Instructor: Van Slyke, Victoria D
Description: Student may contact the instructor or department for information.

SW 8694 Directed Research
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Edleson, Jeffrey L
Description: Student may contact the instructor or department for information.

SW 8821 Social Work and Difference, Diversity and Privilege
A-F only, 2 credit(s);
Instructor: Jaspersen, Faith Marie
Description: Student may contact the instructor or department for information.

SW 8821 Social Work and Difference, Diversity and Privilege
A-F only, 2 credit(s);
Instructor: Gilbert, MJ
Description: Student may contact the instructor or department for information.
SW 8821 Social Work and Difference, Diversity and Privilege  
A-F only, 2 credit(s);  
Instructor: Williams, Oliver Joseph  
Description: Student may contact the instructor or department for information.

SW 8821 Social Work and Difference, Diversity and Privilege  
A-F only, 2 credit(s);  
Instructor: Gibson, Priscilla A  
Description: Student may contact the instructor or department for information.

SW 8841 Social Work Research Methods  
A-F only, 2 credit(s);  
Instructor: Fisher, Colleen  
Description: Student may contact the instructor or department for information.

SW 8841 Social Work Research Methods  
A-F only, 2 credit(s);  
Instructor: Shweta, Shweta  
Description: Student may contact the instructor or department for information.

SW 8841 Social Work Research Methods  
A-F only, 2 credit(s);  
Instructor: Lee, Michael G  
Description: Student may contact the instructor or department for information.

SW 8842 Advanced Social Work Evaluation  
A-F only, 1-3 credit(s), max credits 6;  
Instructor: Remke, Stacy S  
Description: Student may contact the instructor or department for information.

SW 8842 Advanced Social Work Evaluation  
A-F only, 1-3 credit(s), max credits 6;  
Instructor: Kincaid, Tamara  
Description: Student may contact the instructor or department for information.

SW 8842 Advanced Social Work Evaluation  
A-F only, 1-3 credit(s), max credits 6;  
Instructor: Jones, Linda E  
Description: Student may contact the instructor or department for information.

SW 8842 Advanced Social Work Evaluation  
A-F only, 1-3 credit(s), max credits 6;  
Instructor: Hollister, David  
Description: Student may contact the instructor or department for information.

SW 8842 Advanced Social Work Evaluation  
A-F only, 1-3 credit(s), max credits 6;  
Instructor: Semanchin Jones, Annette Marie  
Description: Student may contact the instructor or department for information.

SW 8842 Advanced Social Work Evaluation  
A-F only, 1-3 credit(s), max credits 6;  
Instructor: Sugrue, Erin Patricia  
Description: Student may contact the instructor or department for information.

SW 8861 Theory and Model Development in Social Work  
A-F only, 3 credit(s);  
Instructor: Gilgun, Jane F
SW 8871 Social Work Research Seminar I  
A-F only, 3 credit(s);  
Instructor: Haight, Wendy  
Description: Student may contact the instructor or department for information.

SW 8875 Research Practicum  
S-N only, 2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Lightfoot, Elizabeth Bradford  
Description: Student may contact the instructor or department for information.

Social and Administrative Pharmacy  7-155 Weaver-Densford Hall

SAPh 5100 Pro-Seminar  
A-F only, 1 credit(s);  
Instructor: Schommer, Jon C  
Description: Student may contact the instructor or department for information.

SAPh 8100 Seminar  
A-F only, 1 credit(s), max credits 8, 8 completions allowed;  
Instructor: Schommer, Jon C  
Description: Student may contact the instructor or department for information.

SAPh 8173 Principles and Methods of Implementing Research  
3 credit(s); Two grad stat courses Credit will not be granted if credit has been received for: NURS 8173;  
Instructor: Gross, Cynthia R  
Description: Student may contact the instructor or department for information.

SAPh 8200 Research Problems  
1-8 credit(s), max credits 16, 16 completions allowed;  
Instructor: Oliveira PhD, Djenane R  
Description: Student may contact the instructor or department for information.

SAPh 8235 Pharmaceutical Economics and Policy  
A-F only, 3 credit(s);  
Instructor: Hadsall, Ronald S  
Description: Student may contact the instructor or department for information.

SAPh 8255 Pharmaceutical Marketing  
A-F only, 3 credit(s);  
Instructor: Schommer, Jon C  
Description: Student may contact the instructor or department for information.

SAPh 8700 Hospital Pharmacy Administration  
A-F only, 3 credit(s);  
Instructor: Pastor III, John D  
Description: Student may contact the instructor or department for information.

Sociology  909 Social Sciences Tower

Soc 1001 Introduction to Sociology  
4 credit(s); Soc majors/minors must register A-F Credit will not be granted if credit has been received for: SOC 1011V; Meets CLE req of Social Sciences  
Instructor: Cunnien, Keith A  
Description: The fascination of sociology lies in the fact that its perspective makes us see in a new light the very world in which we have lived all of our lives (Berger 1963). Through a global perspective, this course will introduce you to the study of society, human
social behavior, and social interaction. You will use your "sociological imagination" (Mills) to explore the topics we cover in class. Course topics include culture, socialization, social interaction, deviance, crime, stratification, politics, race, gender, family and education. Class time will be a mix of lecture, discussion, multimedia, small group work and in-class exercises. NOTE: Discussion sessions will not meet on the first week of class.

**Style:** 50% Lecture, 20% Film/Video, 30% Discussion. Movies/ Videos  
**Exam Format:** multiple choice, true/false

**Soc 1001 Introduction to Sociology**

4 credit(s); Soc majors/minors must register A-F  
Credit will not be granted if credit has been received for: SOC 1011V; Meets CLE req of Social Sciences  
**Instructor:** Swartz,Teresa Toguchi  
**Description:** This course is designed to introduce you to the study of society and what Mills calls the "sociological imagination:" a way of viewing the events, relationships and social phenomena that shape our individual lives and much of our collective experience. Through the course we will examine some of the central concepts and problems that have preoccupied both classical and contemporary sociologists, and gain a sense of how the sociological imagination can illuminate the social forces that have a concrete impact on our everyday lives. We will first explore the creation and maintenance of the social order as well as the social processes by which people develop a sense of self and negotiate meanings in everyday social interactions. We then take a look at social structure, social institutions and social stratification. Finally, we will explore how, why, and when social life changes. Throughout the course you will be asked to consider the ways in which society affects your life, and how you, in turn, affect society. Class time will be a mix of lecture, discussion, multimedia, small group work and in-class exercises. The course is targeted to undergraduate majors and non-majors.

**Style:** 50% Lecture, 20% Discussion. videos, small group work, in-class activities, other  
**Grading:** 45% mid exam, 40% reports/papers, 15% other evaluation. class participation/activities/quizzes/labwork  
**Exam Format:** multiple choice, short answer, short essay

**Soc 1001 Introduction to Sociology**

4 credit(s); Soc majors/minors must register A-F  
Credit will not be granted if credit has been received for: SOC 1011V; Meets CLE req of Social Sciences  
**Instructor:** Pellow,David  
**Description:** This course introduces the pivotal questions that underpin classical and contemporary sociological perspectives. Analysis of how society is possible and how social order is maintained are core to an understanding of individuals as both agents and objects that shape and are shaped by their membership in society. Examining this close relationship among the individual, society, and social structures permits us to understand the dynamics of social and power relations in everyday living. The course explores diverse sociological theories purporting to explain the social, political and economic structures prevailing in our society. It also centralizes the importance of social change and the forces that drive or hinder change. The primary course objectives are as follows: (1) Students will be able to demonstrate a comprehensive introductory understanding of key sociological concepts, terminology, theories, approaches, and perspectives. (2) Students will be able to apply sociological analysis to contemporary issues and to their own lives. (3) Students will improve their ability to think critically and to articulate their ideas in written and verbal formats.

**Style:** 65% Lecture, 5% Film/Video, 15% Discussion, 10% Small Group Activities, 5% Guest Speakers. The course involves weekly lectures and discussion sections  
**Grading:** 20% mid exam, 20% final exam, 20% written homework, 20% additional semester exams, 10% attendance, 10% in-class presentation  
**Exam Format:** Each of the three exams will consist of three parts: short answer questions, essay questions, and matching terms with definitions.

**Soc 1011V Honors: Introduction to Sociology**

A-F only, 4 credit(s); Honors Credit will not be granted if credit has been received for: SOC 1001; Meets CLE req of Social Sciences; meets CLE req of Writing Intensive  
**Instructor:** Swartz,Teresa Toguchi  
**Description:** This course is designed to introduce you to the study of society and what Mills calls the "sociological imagination:" a way of viewing the events, relationships and social phenomena that shape our individual lives and much of our collective experience. Through the course we will examine some of the central concepts and problems that have preoccupied both classical and contemporary sociologists, and gain a sense of how the sociological imagination can illuminate the social forces that have a concrete impact on our everyday lives. We will first explore the creation and maintenance of the social order as well as the social processes by which people develop a sense of self and negotiate meanings in everyday social interactions. We then take a look at social structure, social institutions and social stratification. Finally, we will explore how, why, and when social life changes. Throughout the course you will be asked to consider the ways in which society affects your life, and how you, in turn, affect society. Class time will be a mix of lecture, discussion, multimedia, small group work and in-class exercises. This honors section provides an opportunity for more intensive discussion and for hands-on learning with original field research projects.

**Style:** 40% Lecture, 30% Discussion. videos, in-class exercises, student presentations, field research projects
Soc 1571 Sociology
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Dingel, Molly J.
Description: Introduction to foundational ideas and research techniques in sociology. Includes a critical engagement with core concepts, including the sociological imagination, socialization, culture, the interplay between individuals and institutions, and social stratification.

Soc 1905 Freshman Seminar: Global Politics of Eating
A-F only, 3 credit(s);
Instructor: Schurman, Rachel
Description: Hamburgers and Coke, rice and beans, cafe latte, farmed salmon... How and where are these foods produced and consumed, and how has this been shaped by history, politics, and economic power? This course is built on two premises: first, the production, distribution, and consumption of food involve power relationships among different groups of people, and second, one can gain great insights into these relationships through a sociological analysis of food. Among the topics we will explore are: why some people are 'stuffed' while others starve (to borrow a title from Raj Patel's recent book); how we came to eat the way we do; transnational food chains; the Gates Foundation and the new "Green Revolution for Africa"; controversies over GMOs; and fair trade coffee. We will read engaging books and blogs, watch interesting films, and eat together at an ethnic restaurant. Students will also carry out various small group exercises, visit a farmer's market, learn where your food comes from, and engage in debates about the sustainability and future of the global food system.
Style: 20% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 10% Student Presentation, 5% Field Trips, 5% Guest Speakers. This class will be largely discussion based and will require active participation and intellectual engagement.
Grading: 20% final exam, 20% reports/papers, 15% special projects, 10% attendance, 10% reflection paper, 5% in-class presentation, 10% class participation, 10% other evaluation. Grading system subject to change, based on the semester and interest of the class.
Exam Format: Final exam will be a written, take-home essay.

Soc 3101 Introduction to the American Criminal Justice System
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences
Instructor: Samaha, Joel B
Description: Overview and analysis of the U.S. criminal justice system. The course stresses three themes: 1. the balance between the government's power to control crime and the rights of individuals; 2. the appropriate decision making criteria (seriousness of offense, criminal history of offenders, and strength of evidence) that can infect decision-making in the major crime control agencies (police, courts, and corrections); 3. the evaluation of criminal justice policies and practices (Do they work? Are they legal? Are they fair? Are they smart?). The course describes, analyzes, and provides information and arguments to stimulate you to think critically about crime control in a constitutional democracy. Topics include crime, trends in crime, criminals and their families; victims and their families; crime control in a constitutional democracy; criminal law; police roles and culture, police strategies, and police and the Constitution; charging suspects; prosecuting, defending, and sentencing defendants; probation and incarceration; and prisoner reentry into society ("Eventually, they all come home.") No prior knowledge of the criminal justice system is required.
Style: 55% Lecture, 5% Film/Video, 20% Discussion, 10% Small Group Activities, 5% Guest Speakers. 1. documentary videos of police, courts, corrections; 2. Guest lecturers are Minnesota criminal justice professionals, including police officers, prosecutors, defense attorneys, judges, and corrections officials
Grading: 10% class participation, 90% other evaluation. 3 NONCUMULATIVE exams + a NONCUMULATIVE final%
Exam Format: multiple choice, True/False, and short essays

Soc 3101 Introduction to the American Criminal Justice System
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences
Instructor: Lageson, Sarah Esther
Description: This course will introduce you to the fundamentals of the American Criminal Justice system and the ways sociologists study this system. We will learn about the three major components of justice: police, courts, and corrections, and discuss the ways in which this system is analyzed through criminological theory and represented in media and popular culture. The course will consist of guest speakers, documentary film screenings, interactive lecture, and field observation.
Style: 30% Lecture, 20% Film/Video, 15% Discussion, 10% Demonstration, 10% Field Trips, 15% Guest Speakers.
Grading: 60% mid exam, 30% special projects, 10% class participation.
Exam Format: Definitions, Short Answer

Soc 3102 Introduction to Criminal Behavior and Social Control
Soc 3211W American Race Relations
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Krausch, Meg
Description: In this class we will explore the meaning of "race" in the United States, looking at both contemporary and historical context. While we will spend significant time on the African American experience, we will move beyond a black/white framework to examine Asian American, Latino, white and immigrant identities and social relationships, reflecting on where these histories parallel and where they differ from each other. We will utilize the concept of intersectionality as a means of understanding how racial identities are inflected by other social identities such as gender, sexuality, and class. As we learn, we will at the same time look for ways that we can intervene in the social world and challenge the status quo. As a class, we will spend the majority of our time discussing the readings, and making connections between them and our daily lives. My hope for this class is that we can collaborate and learn from each other. Therefore, participation is expected not only in your interactions with the instructor but in your interactions with each other. Since this is a writing intensive class, significant effort will also be expected toward improving our ability to express ourselves in written form and sociologically.

Soc 3251W Sociological Perspectives on Race, Class, and Gender
A-F only, 3 credit(s); Soc majors/minors must register A-F Credit will not be granted if credit has been received for: AFRO 3251W:Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Strano, Andria J
Description: Race, class and gender, and the inequalities associated with them, affect all of our lives but are often taken for granted and rarely confronted, challenged or contested. This course will examine the social construction of race, class and gender, discussing how individual experiences are shaped by various social institutions. A central focus of this course will be developing an understanding of how systems of oppression reinforce and intersect with each other. We will explore these ideas through a combination of academic books, novels, and films. We will devote the last few weeks of the course to discussing possible approaches to addressing social inequalities.

Soc 3301W Politics and Society
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Broadbent, Jeffrey Praed
Description: Politics is part of society, but society includes much more than just formally political institutions such as voting, legislatures, and presidents. Society includes different forms of social organization and culture that exist in their own right, but also affect the behavior of politics. For instance, society is divided by categories of race, class, gender, age, education, religion, and associational life. These categories provide motivations such as preferences for nationalism, freedom or security. We can clearly see the effect of these categories and their specific contents in the current US presidential contest. But other societies, as well as international or global society, also have their own social and cultural characteristics. To explain the political behavior of individuals, communities, nations and the world, we have to understand their social and cultural contexts. Sociology, the science of society, is the field of study that most directly focuses on the creation, maintenance and effect of these categories in modern, industrialized societies. Political sociology consists of the study of the interaction between social and cultural qualities and politics. This class will cover the core concepts, theories and findings of the field through lectures and discussions. One consistent theme will be discussion of the presidential election in these terms. Requirements include pop-quizzes, exercises, mid-term and final exam and term paper. For the term paper, the student can follow their interests and choose almost any topic, as long as it concerns how a given social and/or cultural category affects some political process at local, national, foreign or international levels. Topic must be approved by the instructor. This term the course will not include participant observation research
Style: 60% Lecture, 40% Discussion.
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 15% special projects, 10% quizzes, 5% class participation.
Exam Format: essay

Soc 3411W Organizations and Society
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Knoke, David H

Description: This course introduces undergraduates to contemporary theories and debates about formal organizations in an international context, including such forms as large corporations, small businesses, public bureaucracies, nonprofits, voluntary associations, social movement organizations, terrorist networks and counterterror organizations. A special focus is corporate and governmental actions that brought about the Global Financial Crisis and Great Recession, and the U.S. health care reform effort. Our primary objectives are: (1) To compare, from the perspectives of people in affected nations, the diverse assumptions, interpretations, and organizational responses to complex globalization processes. (2) To identify significant differences and consequences of the social institutions - customs, norms, associations, laws, governments - that manage and regulate organizational behaviors from the workplace to multinational corporations. (3) To examine organizational networks of economic, technological, cultural, and political relations that interconnect the world's societies and nation-states. Classes consist of lectures, role-playing activities, occasional film clips, and small and large group discussions of the issues raised by the reading assignments. This course is certified for International Perspectives theme. It is a writing intensive course, with options for a community service learning project or a major project paper.

Style: 50% Lecture, 12% Film/Video, 25% Discussion, 13% Small Group Activities.

Grading: 100% reports/papers. Any student with more than four unexcused absences cannot obtain a course grade higher than B+.

Soc 3501 Sociology of Families
A-F only, 4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences

Instructor: Heise, Kia

Description: This class will explore families in contemporary American society with historical and cross-cultural comparisons. We will examine how the family unit intersects with other social institutions and how race, class, and gender shape family experiences. We will cover various topics, such as: marriage, divorce, parenthood, adoption, family violence, teen sexuality, gay/lesbian families, and religion in families.

Style: 40% Lecture, 20% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Guest Speakers.

Soc 3531 Health Policy in a Global Context
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences

Instructor: Sage PhD, Starr Kelly

Description: This class will explore families in contemporary American society with historical and cross-cultural comparisons. We will examine how the family unit intersects with other social institutions and how race, class, and gender shape family experiences. We will cover various topics, such as: marriage, divorce, parenthood, adoption, family violence, teen sexuality, gay/lesbian families, and religion in families.

Style: 40% Lecture, 20% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Guest Speakers.

Soc 3701 Social Theory
A-F only, 4 credit(s);

Instructor: Broadbent, Jeffrey Praed

Description: Social theories help us understand society and how it works in new and helpful ways. In this class, we cover the development of social theory from the classical and founding works of Marx, Durkheim and Weber, through more contemporary ideas such as feminism, rational choice, racism, and post-modernity. Throughout this class, we have three goals: to learn to read and understand key theoretical work in sociology; to use this work to better understand the social world; and to develop our own capacity to talk and write about the world using ideas from theory.

Style: 77% Lecture, 10% Film/Video, 10% Discussion, 3% Student Presentation.

Grading: 20% mid exam, 20% final exam, 40% reports/papers, 18% quizzes, 2% in-class presentation.

Exam Format: The tests are designed to evaluate your mastery of the concepts and ideas covered by the readings, lectures and discussions. The questions will be mostly short-answer and essay. The first three tests are worth 150 points each. The fourth is 200.

Soc 3701 Social Theory
A-F only, 4 credit(s);

Instructor: Gowan, Teresa

Description: Social theory helps us to make sense from chaos, revealing core logics of development, change, meaning and domination which structure the bewildering, messiness of human experience. This class works closely with texts by a handful of great theorists who have created particularly illuminating, even world-changing ways of seeing. Reading extracts from Marx, Durkheim, Weber, Gramsci, De Beauvoir, Fanon, Patricia Hill Collins, Dorothy Smith, Debold, Foucault, and Baudrillard we will concentrate on readings around notions of power: economic, racist, colonial, patriarchal, bureaucratic, and discursive. You should improve your ability to think, read, and LIVE critically, able to better recognize and evaluate assumptions underlying "common sense" statements about how societies work. I believe that theoretical competence comes when you learn to enjoy intellectual creativity and risk-taking, and so we will spend considerable class time using debate and role-playing to loosen up those Minnesota inhibitions. Reading will not be extensive in terms of number of pages, but I will expect you to wrestle energetically before class with texts that can sometimes be both dense and abstract. Most of the required reading reports and other assignments will be self published by students on the class blog, which will enrich the depth and scope of class debate.

Style: 50% Lecture, 40% Discussion, 10% Small Group Activities.

Grading: 40% exams, quizzes. 40% Official Blog Entries. 20% class citizenship and blog citizenship. Each absence after three will decrease your grade by .2. E.g. 3.3 > 3.1 (B+ > B)
Exam Format: Quotation identification and analysis. Comparison of theories and/or application to historical & contemporary phenomena.

**Soc 3701 Social Theory**

A-F only, 4 credit(s);

Instructor: Park, Lisa Sun-Hee

Description: COURSE OVERVIEW Social theory presents a way of "seeing" the world and is itself social, in that it is created in the context of that time and circumstance. This class presents a survey of sorts of major social theorists who have contributed important ideas regarding how and why the world works in the way that they think it does. Given the limitations of a semester, we have room for just a brief encounter of a few of the many foundational social thinkers that have shaped our understanding of society. The focus of this course is necessarily placed upon those "classical" theories, from which so many others have built their ideas. The goal of this course is to familiarize you with some of these sociological ideas as a gateway to developing greater intellectual curiosity and perhaps even pursuing further investigations on your own. Perhaps one of the biggest obstacles in this intellectual endeavor is not only the complexity of the ideas but the many times cumbersome language in which it is expressed. Consequently, we will devote considerable class time to go over the ideas and specific passages together. Articulating our interpretations and trying out our questions - verbally and in written form. Obviously, this method will only work if you come to class prepared and ready to discuss the readings. Finally, regardless of your current and future goals, the capacity to critically analyze a complex theory and powerfully express your own ideas is indispensable. The assignments and exams for this course are intended to develop and strengthen your ability to do so. COURSE REQUIREMENTS This course will involve lectures, discussions, films, and a creative or service learning project. Attendance and active participation is mandatory. Missed lectures cannot be "made up". I do not provide mini-lectures during office hours or distribute my lecture notes. There will be weekly written assignments, two exams and a final paper/project. - The in-class exams will assess your comprehension of course materials. The format may include short answer, multiple choice, and/or essay questions. It will be open-book and open-notes. - The weekly written assignments are short, one-page (single space) analytical exercises that demonstrate your understanding or grappling of that week's readings. These are due at the beginning of class on Wednesday during the 10 weeks in which readings are assigned. In these exercises, you are expected to: 1) cite a particular passage or sentence that you found intriguing; 2) provide a brief explanation why you chose this passage/sentence; and 3) articulate a question for further discussion. - You will have the option of choosing a creative project or an analytic paper. The objective of this assignment is to delve more deeply into one or more of the theorists or theories discussed in class. More detailed instructions will be provided separately.

**Soc 3721 Principles of Social Psychology**

3 credit(s);

Instructor: Mortimer, Jeylan T

Description: Principles of Social Psychology Social psychology is at the intersection of "macro" and "micro" sociology. This class will illuminate the dynamic linkages among social organization, interaction processes, attitudes, and the self. Students will learn principles of social psychology drawn from multiple theoretical perspectives, including symbolic interactionism, expectation states theory, social structure and personality, and the life course. The course will cover a broad range of topics as well as the diverse methods that social psychologists use to study them (for example, experiments, surveys, ethnographic observation). The class will show the relevance of the classic literature of social psychology to contemporary social problems and issues, including rapid social and technological change, inequality (based on gender, race/ethnicity, occupation, wealth), discrimination, torture, and terrorism.

Style: 50% Lecture, 5% Film/Video, 10% Discussion, 35% Small Group Activities.

Grading: 40% mid exam, 50% final exam, 10% in-class presentation.

Exam Format: Short essay.

**Soc 3801 Sociological Research Methods**

4 credit(s);

Instructor: Green, Kyle David

Description: Student may contact the instructor or department for information.

**Soc 3801 Sociological Research Methods**

4 credit(s);

Instructor: Msechu, June

Description: This course is designed to introduce you to the ways that sociologists gather, present, and critique evidence about society. You will gain a working knowledge of common sociological methods including ethnography, archival research, surveys, and experiments. Equal emphasis will be placed on training you on how to conduct research as well as developing your ability to effectively critique the sociological research that others have done.

Style: 50% Lecture, 15% Film/Video, 10% Discussion, 10% Laboratory, 10% Small Group Activities, 5% Guest Speakers.

Grading: 20% mid exam, 20% final exam, 30% reports/papers, 10% written homework, 10% class participation, 10% laboratory evaluation.

Exam Format: Exams will be non-cumulative. They will consist of vocabulary words, short answer, and short essay questions.
Soc 4101W Sociology of Law
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Boyle, Elizabeth Heger
Description: Law is an institution of enormous social impact, where the most pressing and controversial issues of our time are debated (e.g., When is a collection of cells a human being? Should the state be allowed to kill juveniles who commit crimes? Who owns electronic information?). Sometimes people turn to law for protection and relief; at other times, they seek to avoid it at all costs. Law can be a force for achieving equality and redistributing power in society; yet it can also be conservative, rooted in age-old traditions and customs, with tightly controlled boundaries. Law is located in myriad places, from university codes of conduct to labor, immigration, and opposition to militarism and neo-liberal capitalism. The emphasis will be on applying concepts and theories to bring about change. The course is organized around theoretical issues concerning how people become recruited and committed to transnational activism, how they develop cosmopolitan identities, and how states, non-governmental organizations, and transnational collective action, as well as the strategies and tactics they use, and the long-term and short-run impact of transnational activism. These issues will be addressed through various empirical case studies, which focus on environmentalism, human rights, labor, and opposition to militarism and neo-liberal capitalism. The emphasis will be on applying concepts and theories to help us understand the transnational activist network or movement selected for your research paper.
Style: 20% Lecture, 30% Discussion, 30% Small Group Activities, 40% other evaluation. Homework problem sets
Grading: 75% reports/papers, 25% quizzes. To receive an A or A- for the course, students must attend all classes and complete all assignments, including all in-class exercises and three moodle website submissions. The five pop quizzes will cover the material in the required readings.

Soc 4090 Topics in Sociology: Transnational Activism
3 credit(s), max credits 6;
Instructor: Aminzade, Ron R
Description: Focusing on the origins, dynamics, and consequences of transnational activism, this course explores the opportunities and challenges facing transnational activists, connections between local and global activism, and the role of transnational activism in bringing about change. The course is organized around theoretical issues concerning how people become recruited and committed to transnational collective action, how they develop cosmopolitan identities, and how states, non-governmental organizations, and international institutions shape opportunities for transnational activism. We will also explore how people acquire the capacity to organize across nation-state borders, the strategies and tactics they use, and the long-term and short-run impact of transnational activism. These issues will be addressed through various empirical case studies, which focus on environmentalism, human rights, labor, immigration, and opposition to militarism and neo-liberal capitalism. The emphasis will be on applying concepts and theories to help us understand the transnational activist network or movement selected for your research paper.
Style: 20% Lecture, 30% Discussion, 30% Small Group Activities, 20% Student Presentation.
Grading: 75% reports/papers, 25% quizzes. To receive an A or A- for the course, students must attend all classes and complete all assignments, including all in-class exercises and moodle website submissions. The five pop quizzes will cover the material in the required readings.

Soc 4090W Topics in Sociology: Social Change & the Global City
3 credit(s), max credits 6;
Instructor: Goldman, Michael R
Description: SOCIAL CHANGE IN THE GLOBAL CITY In the spring of 2007, someone moved to the city. That move marked the tipping point of a new urban century in which more than half of the world's population now lives in cities, mostly in the global South, e.g., Guangzhou (China), Johannesburg (South Africa), Surat (India). In 2011, we observed another important urban event: cities exploded in social protest, from the Arab Spring revolutions in Cairo, Tunis, and Manama, to the Occupy Wall Street movements crisscrossing London, Madrid, Athens, and New York City. Has the era of urban revolution and transformation begun? Is living in these cosmopolitan zones reflective of a new type of freedom, democracy, lifestyle, and opportunity? How can we reconcile these hopeful images of the global city with the sobering reality that the vast majority lives in poverty, without fair access to basic goods and rights, such as clean water, living wages, and social justice? We will pursue these questions in depth through excellent readings, films, paper writing, debates, small research projects, and lots of virtual travel. We will visit a range of cities -- Shanghai, Bangalore, Mumbai, Johannesburg, Rio, Buenos Aires, and even Minneapolis -- experiencing them from street level and from above, to gain a robust understanding of this new era of urban cultures, politics, and globalization.
Style: 50% Lecture, 5% Film/Video, 25% Discussion, 15% Small Group Activities, 3% Student Presentation, 2% Guest Speakers.
Grading: 75% reports/papers, 10% special projects, 5% in-class presentation, 10% class participation.

Soc 3811 Basic Social Statistics
4 credit(s);Meets CLE req of Mathematical Thinking
Instructor: Warren, John R
Description: This course is designed to familiarize students with fundamental statistical concepts and techniques. Because this is a sociology course, most of the examples and demonstrations will be drawn from the social sciences; however, the concepts and techniques presented in the course apply much more broadly to other disciplines and to other arenas of life. I do not expect students to become expert statisticians, but I do expect them to gain an understanding of how statistics can be used to address key social science questions. In the short term, I expect that students doing quantitatively-oriented senior projects will be able to carry out that task. In the longer run I expect students to be knowledgeable and critical consumers of statistical information that appears in the media and elsewhere. This course includes overviews of the logic of sampling and causal inference; techniques for graphically and numerically describing distributions; the normal curve; relationships between quantitative variables; relationships between categorical variables; analysis of variance; probability; random variables; sampling distributions; statistical inference; confidence intervals; hypothesis testing; bivariate linear regression; analysis of covariance; multiple linear regression; and binary logistic regression.
Style: 40% Lecture, 40% Laboratory, discussion/small group work
Grading: 35% mid exam, 15% final exam, 10% class participation, 40% other evaluation. Homework problem sets
Exam Format: Short answer math problems, usually asking for interpretation of results and/or statistical concepts

Soc 4049 Topics in Sociology: Social Change & the Global City
3 credit(s), max credits 6;
Instructor: Boyle, Elizabeth Heger
Description: This course is designed to familiarize students with fundamental statistical concepts and techniques. Because this is a sociology course, most of the examples and demonstrations will be drawn from the social sciences; however, the concepts and techniques presented in the course apply much more broadly to other disciplines and to other arenas of life. I do not expect students to become expert statisticians, but I do expect them to gain an understanding of how statistics can be used to address key social science questions. In the short term, I expect that students doing quantitatively-oriented senior projects will be able to carry out that task. In the longer run I expect students to be knowledgeable and critical consumers of statistical information that appears in the media and elsewhere. This course includes overviews of the logic of sampling and causal inference; techniques for graphically and numerically describing distributions; the normal curve; relationships between quantitative variables; relationships between categorical variables; analysis of variance; probability; random variables; sampling distributions; statistical inference; confidence intervals; hypothesis testing; bivariate linear regression; analysis of covariance; multiple linear regression; and binary logistic regression.
Style: 40% Lecture, 40% Laboratory, discussion/small group work
Grading: 35% mid exam, 15% final exam, 10% class participation, 40% other evaluation. Homework problem sets
Exam Format: Short answer math problems, usually asking for interpretation of results and/or statistical concepts
international treaties on torture. It permeates every aspect of modern life. In this course, students will learn about the sources, content, and impact of law from a sociological perspective.

**Style:** 25% Lecture, 10% Film/Video, 25% Discussion, 25% Small Group Activities, 5% Student Presentation, 10% Guest Speakers.

**Grading:**
- 45% mid exam
- 40% reports/papers
- 5% quizzes
- 5% attendance
- 5% in-class presentation

**Exam Format:** Short-answer essay exams.

### Soc 4105 Sociology of Punishment and Corrections

**A-F only, 3 credit(s);**

**Instructor:** Page, Joshua A

**Description:** This course is an in-depth sociological analysis of core penal institutions in the United States. We examine the origins, functions, and effects of incarceration from the 19th century to the present; the culture and social relations in male and female prisons; the prisoner rights movement of the 1960s and 1970s; and the causes and consequences of America's extraordinary prison boom. Along with imprisonment, we study the birth and transformation of "community corrections" (e.g., parole and probation) and the death penalty. This class combines readings, lectures/discussions, and films.

**Style:** 35% Lecture, 15% Film/Video, 35% Discussion, 15% Small Group Activities.

**Exam Format:** One in-class and two take-home exams.

### Soc 4142 Juvenile Law

**3 credit(s);**

**Instructor:** Malmquist, Carl P

**Description:** An overall focus on issues involving juveniles in our society and how various issues are dealt with in the system of juvenile justice. Topics include: allocation of power among juveniles, families, and the state; problems that arise for juveniles with the school setting and within families; abuse and child neglect; children's rights; and the juvenile court and its origins up to more current problems. Various types of cases and problems that arise in the juvenile justice system will be considered.

**Style:** 60% Lecture, 30% Discussion. videos

**Grading:** 95% other evaluation. exams, 5% class participation

**Exam Format:** multiple choice

### Soc 4161 Criminal Law in American Society

**3 credit(s);**

**Instructor:** Samaha, Joel B

**Description:** What's criminal law and what's it good for? Should we punish people only for what they do? or for what they might do? or even sometimes for who they are? What are the justifications and excuses for committing crimes? Topics: elements of crime that the prosecution has to prove beyond a reasonable doubt; accomplices; criminal attempts; defenses of justification (self-defense, defense of home) and defenses of excuse (insanity, age); criminal homicide; criminal sexual conduct. Read and discuss actual cases edited for non lawyers. Intensive class discussion. For upper division undergraduates, all majors.

**Style:** 15% Lecture, 85% Discussion.

**Grading:** 10% class participation, 90% other evaluation. weekly exams covering reading and discussion

**Exam Format:** 40%, short answer quiz on each week's assigned reading (no notes or books allowed); 20%, analysis of week's assigned cases (take home); 40%, reaction essay based on the day's discussion topic (open book and notes)

### Soc 4190 Topics in Sociology With Law, Criminology, and Deviance Emphasis: Homelessness & Marginality in the United States

**3 credit(s), max credits 6;**

**Instructor:** Gowan, Teresa

**Description:** Hard Times and Bad Behavior: Homelessness and Marginality in the United States Please read carefully! (1) You need to have taken Soc 3701 Social Theory or other classes giving you a good introduction to the core ideas of Marx and Foucault. (2) This is an unusual class to have the LCD designation, and is indeed designed for students across the sociology major. If you are looking for a service or policy-oriented introduction to contemporary homelessness, this may not be the class for you. On the other hand, if you enjoy working with diverse materials and challenging ideas, please read on. Hard Times and Bad Behavior examines several zones of US "low life" through the first-person accounts of impoverished Americans themselves, as well as those of the reformers, academic experts, authors, and musicians who have interpreted, analyzed, or condemned them. As we read about hobos and sailors, opium users and saloon girls, as well as contemporary experiences on the streets we will trace some enduring themes within marginality in the United States. Particular emphasis will be paid to the rootlessness produced by the American labor market, the love-hate relationship between elites and marginal populations in popular culture, and the complex mixture of freedom and deprivation experienced by people living on the edge. Interested students should be aware that the perspective presented in this class may differ considerably from what you might expect from the subject matter. This is neither a "social problems" nor a criminology class, but instead an examination of the cultural, economic and political aspects of homelessness and related forms of marginality which draws on a wide variety of materials from the 1880s onwards. There is a substantial emphasis on historical topics such as great tramp scare, the...
Soc 4461 Sociology of Ethnic and Racial Conflict

Description: This course introduces students to the theoretical and historical foundations of race relations in the United States. In particular, we focus on the formation of racial and ethnic identities, on how these are produced through political struggle at the local, national, global scales, and how they are maintained and transformed over time. We pay close attention to the ways in which race and ethnicity intersect with gender, sexuality, class, citizenship, and nation in order to better understand how systems of power, privilege, and inequality are constructed, reinforced, and challenged. The role and impact of social movements in shaping these social categories will be at the center of the course focus. Students are expected to apply social scientific concepts and theories to the subject matter, drawing on frameworks from Sociology, History, American Studies, Ethnic Studies, and Law. This multidisciplinary approach is intended to address important gaps in the study of race and ethnic conflict that necessarily exist within any single discipline. This course meets the University of Minnesota's Liberal Education requirement of the Cultural Diversity and Social Justice Theme.

Style: 65% Lecture, 10% Film/Video, 15% Discussion, 5% Small Group Activities, 5% Guest Speakers.

Grading: 30% mid exam, 30% final exam, 10% quizzes, 20% written homework, 10% class participation.

Exam Format: Both the midterm and final exams will be take home tests requiring the use of course readings, lectures, discussions, and films to answer questions.
Soc 4966W Major-Project Seminar
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Gerteis, Joseph Howard
Description: In this "capstone" version of the course, we will be looking back at what sociology was all about, looking forward to what sociology majors do after graduation. Most important, the course will provide the resources, assistance and encouragement to help majors in the Sociology Department to fulfill this requirement for a paper in the major field during the senior year -- mostly based on observational studies tied to service learning projects. The course is organized as a seminar and workshop. There are no formal lectures, but the instructor will present overviews of the stages of research and writing necessary to complete the senior project paper. Students build their major project through completing guided, periodic assignments. Along the way, we will be reading and thinking about how to apply a sociological eye to understand success, failure, and the world around us.
Style: 25% Discussion, 25% Small Group Activities, 10% Guest Speakers, 40% Service Learning.
Grading: 50% reports/papers, 10% attendance, 20% journal, 20% class participation.

Soc 4977V Senior Honors Proseminar I
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Hartmann PhD, Douglas
Description: The Senior Honors Proseminar is designed to help students in researching and writing their Honors Theses. Proseminar I is dedicated to (1) thinking about biography and research interests, (2) the identification of a research question, (3) literature search and the writing of a literature review, (4) the identification of an appropriate research method and first steps toward the development of a research instrument, (5) the consideration of human subjects concerns, and finally (6) the construction of a research plan and drafting of a "data and methods" section. It will be followed by Proseminar II in Spring Semester during which students will collect and analyze data, present their research at the annual Sociology Research Institute, and write the results, discussion and conclusion sections of their theses.
Style: 35% Lecture, 30% Discussion, 15% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.
Grading: 65% reports/papers, 20% written homework, 15% class participation.

Soc 5455 Sociology of Education
3 credit(s); 1001 or equiv or instr consent; soc majors/minors must register A-F Credit will not be granted if credit has been received for: OLPD 5041;
Instructor: Seashore, Karen Rose
Description: Structures and processes within educational institutions. Links between educational organizations and their social contexts, particularly as these relate to educational change.

Soc 5455 Sociology of Education
3 credit(s); 1001 or equiv or instr consent; soc majors/minors must register A-F Credit will not be granted if credit has been received for: OLPD 5041;
Instructor: Gordon, Molly Flynn
Description: Structures and processes within educational institutions. Links between educational organizations and their social contexts, particularly as these relate to educational change.

Soc 5811 Intermediate Social Statistics
4 credit(s);
Instructor: Knoke, David H
Description: Measurement, theory of probability, and bivariate statistics. Multiple regression analyses of sociological data.
Style: 67% Lecture, 33% Laboratory.
Grading: 100% reports/papers. Three papers involve statistical analyses of social datasets.

Soc 8001 Sociology as a Profession
S-N only, 1 credit(s), max credits 2;
Instructor: Meier, Ann
Description: Student may contact the instructor or department for information.

Soc 8190 Topics in Law, Crime, and Deviance: Atrocities: Collective Representation and the Law
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Savaelsberg, Joachim J
Description: This inter-disciplinary and inter-university seminar, co-taught via ITV technology by Profs. John Hagan from the Department of Sociology and the Law School of Northwestern University and Joachim Savaelsberg from the Department of Sociology of the University of Minnesota will address social scientific, judicial and journalistic depictions of atrocities. These themes will be explored with a focus on the cases of Darfur, Rwanda, and the wars in the former Yugoslavia, supplemented by references to other cases of
Soc 8190 Topics in Social Psychology

Description: Theories of Social Psychology

Instructor: Mortimer, Jeylan T

Style: Lecture, Non-graded, 45% Lecture, 55% Discussion.

Grading: 70% reports/papers, 30% attendance.

Soc 8721 Theories of Social Psychology

Description: Social psychology is basic to an understanding of social life, including social phenomena at both macro- and micro-levels, and the linkages between them. Social psychology is central to the link between structure and agency, as it considers how individual-level perceptions, cognitions, goals and behavioral strategies operate in social contexts. This seminar starts with an examination of "personal structure," emphasizing the cultural variability of self-conceptions and identities, cognitive processes, emotion...
and motivation, as well as biosocial bases of action. We review individual-level "building blocks" of social psychological theories, including attitudes and values, identities, and emotions. We then apply prominent theories of social psychology, symbolic interactionism and exchange theory, to the study of interpersonal relations, networks, and group dynamics. Structural social psychology ("social structure and personality"), of special relevance to the study of the self, attitude formation, stress, coping, and mental health, is then considered. Finally, we discuss how the social psychological theories and conceptual frameworks considered in the seminar illuminate key substantive topics of interest to sociologists, with emphasis on inequality e.g., the effects of class, minority status, and gender on disparities in self-concept, identity and health; the development of status hierarchies in face to face and small group interaction; and intergroup relations, prejudice, and discrimination. Social psychological perspectives on work and social mobility, the life course, deviance, and social movements are also addressed. The required readings feature the contemporary theoretical and substantive literature. Students are expected to write a term paper or two shorter papers that relate the subject matter of the seminar to their own areas of interest. For further information, contact Jeylan Mortimer at morti002@umn.edu or 612 624 4064.

**Style:** 25% Lecture, 55% Discussion, 20% Student Presentation.

**Grading:** 60% reports/papers, 20% in-class presentation, 20% class participation.

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**Soc 8790 Advanced Topics in Sociological Theory: Feminist Social Theory**

- **3 credit(s), max credits 12, 4 completions allowed;**
- **Instructor:** Park,Lisa Sun-Hee
- **Description:** Student may contact the instructor or department for information.

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**Soc 8890 Advanced Topics in Research Methods: Interviewing**

- **3 credit(s), max credits 12, 3 completions allowed;**
- **Instructor:** Schuman,Rachel
- **Description:** Arlie Hochschild, Lillian Rubin, and Michele Lamont have all given us rich sociological insights into the hearts, minds and lives of US workers on the basis of in-depth interviews. Other skillful interviewers have opened up other worlds to the sociological imagination, and taught us much about the way people think, feel, and make sense of the world as well as of their own identities and `positionality.` In this course, we explore in-depth interviewing as a qualitative research method, learning how to conduct interviews; transcribe, code, and analyze interview data; and write up interview-based research. We also consider a range of epistemological, practical, and ethical issues related to interviewing as a research method, reading materials drawn from a broad range of substantive sociological subfields as well as from geography. This course is particularly well-suited to graduate students who have an interview-based project in mind and want to acquire the skills for carrying out their research; and students who are considering using interviews in their dissertation research and want to try their hand at using this method. Because this is a hands-on, fieldwork-based course, no auditors are permitted. The course is organized around carrying out an interview-based research project, writing a substantive paper using data you collect, and reading and workshop each other's papers in class. It would be most useful if you come into the course having done some thinking about a research topic you want to pursue. Students will need to turn in and present a research proposal for their interview project within the first two weeks of class and seek and receive IRB approval for their research.
- **Grading:** 30% reports/papers, 30% special projects, 10% in-class presentation, 30% class participation.

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**Software Engineering**

**6-202 Kenneth H Keller Hall**

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**SEng 5707 The Principles of Database Systems**

- **A-F only, 3 credit(s);**
- **Instructor:** Carlis,John Vincent
- **Description:** Student may contact the instructor or department for information.

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**SEng 5801 Software Engineering I: Overview, Requirements, and Modeling**

- **A-F only, 3 credit(s);**
- **Instructor:** Heimdahl,Mats
- **Description:** Student may contact the instructor or department for information.

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**SEng 5851 Software Project Management**

- **A-F only, 3 credit(s);**
- **Instructor:** Kaman,John Francis
- **Description:** Student may contact the instructor or department for information.

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**SEng 5861 Introduction to Software Architecture**

- **A-F only, 3 credit(s);**
- **Instructor:** Whalen,Michael W
- **Description:** Student may contact the instructor or department for information.
SEng 5899 Software Engineering Seminar
  1 credit(s), max credits 2;
  Instructor: Whalen, Michael W
  Description: Student may contact the instructor or department for information.

SEng 8494 Capstone Project (Plan B Project)
  S-N only, 3 credit(s);
  Instructor: Collins, John
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Hedger, Dick
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Carlis, John Vincent
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Kruse, John Michael
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Collins, John
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Vayghan, Jamshid A.
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Kan, Stephen Hauwah
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Calvo, Michael Joseph
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Schutta, Nathaniel T
  Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
  2-6 credit(s), max credits 12;
  Instructor: Freese, Jesse David
  Description: Student may contact the instructor or department for information.
Instructor: Heimdahl, Mats  
Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project  
2-6 credit(s), max credits 12;  
Instructor: Srivastava, Jaideep  
Description: Student may contact the instructor or department for information.

Instructor: Bitzenhofer, Neil A  
Description: Student may contact the instructor or department for information.

Instructor: Skovbroten, John Emil  
Description: Student may contact the instructor or department for information.

**Soil, Water, and Climate 439 Borlaug Hall**

**Soil 1125 The Soil Resource**  
4 credit(s); Credit will not be granted if credit has been received for: SOIL 2125; Meets CLE req of Environment  
Instructor: Cooper, Terence H  
Description: This course is designed for undergraduates who have completed some of the basic sciences (biology, chemistry). The course covers the 5 basic areas of: 1) Soil classification; 2) Soil formation; 3) Physical properties; 4) Biological properties; and 5) Chemical properties. Students must use the WWW to read required information before doing hands-on laboratory activities. Individual exams, team exams, lecture dyads, lab reports, land-use project, and final exam are used to determine course grades. Lecture notes on the WWW.  
Style: 60% Lecture, 40% Discussion.  
Grading: 15% mid exam, 15% final exam, 40% quizzes, 10% laboratory evaluation, 20% other evaluation. Land use project  
Exam Format: MC

**Soil 2125 Basic Soil Science**  
A-F only, 4 credit(s); [CHEM 1015, CHEM 1017] or CHEM 1021 or equiv Credit will not be granted if credit has been received for: SOIL 1125; Meets CLE req of Environment; meets CLE req of Physical Sciences  
Instructor: Cooper, Terence H  
Description: Student may contact the instructor or department for information.

**Soil 2125 Basic Soil Science**  
A-F only, 4 credit(s); [CHEM 1015, CHEM 1017] or CHEM 1021 or equiv Credit will not be granted if credit has been received for: SOIL 1125; Meets CLE req of Environment; meets CLE req of Physical Sciences  
Instructor: Cooper, Terence H  
Description: This course is designed for undergraduates who have completed some of the basic sciences (biology, chemistry). The course covers the 5 basic areas of: 1) Soil classification; 2) Soil formation; 3) Physical properties; 4) Biological properties; and 5) Chemical properties. Students must use the WWW to read required information before doing hands-on laboratory activities. Web exams, team exams, lecture dyads, lab reports, land-use project and final exam are used to determine course grades. Lecture notes on the WWW.  
Style: 60% Lecture, 40% Discussion.  
Grading: 15% mid exam, 15% final exam, 40% quizzes, 10% laboratory evaluation, 20% other evaluation. Land use project  
Exam Format: MC

**Soil 3521 Soil Judging**  
A-F only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Cooper, Terence H  
Description: Students who participate in the regional or national soil judging contest are eligible to enroll in this course. Soil judging contests are in October and require 4 days of commitment. Students should have completed Soil 4511  
Style: Field trip to contest  
Grading: 100% final exam.
Soil 4093 Directed Study  
1-7 credit(s), max credits 20, 20 completions allowed;  
Instructor: STAFF  
Description: Students who want to explore a special topic of their interest should visit with a faculty member who will direct their exploration. Report length dependent on the credits.  
Style: Independent research

Soil 4094 Directed Research  
1-7 credit(s), max credits 7, 1 completion allowed;  
Instructor: STAFF  
Description: Students who want to do research in a special area should determine a faculty member who will guide their research activities. Research depth depends on the credits.  
Style: Independent study

Soil 4511 Field Study of Soils  
A-F only, 2 credit(s);  
Instructor: Cooper, Terence H  
Description: This is a field course that requires students to learn how to write soil profile descriptions. Students visit numerous roadcuts and determine the morphological characteristics of the soils observed. Final field exam determines the course grade. Field exam is open book. Class meetings end first week of November. Week long trip to another state for further soil investigation is possible.  
Style: 100% Laboratory.  
Grading: 100% final exam.

Soil 5125 Soil Science for Teachers  
3 credit(s); Credit will not be granted if credit has been received for: SOIL 1125;  
Instructor: Cooper, Terence H  
Description: This course is designed for teachers who have completed some of the basic sciences (biology, chemistry). The course covers the 5 basic areas of: soil classification, soil formation, physical properties, biological properties and chemical properties. Students must use the WWW to read required information before doing hands-on laboratory activities. Lecture notes on the WWW. Students have the opportunity to prepare lesson plans for their students.  
Style: 60% Lecture, 40% Discussion.  
Grading: 40% mid exam, 10% final exam, 20% quizzes, 10% laboratory evaluation, 20% other evaluation. land use project

Soil 5232 Vadose Zone Hydrology  
3 credit(s);  
Instructor: Gupta, Satish C  
Description: This course is intended for undergraduates and graduate students in Soil, Water, & Climate, Water Resources, Institute of Technology, Environmental Sciences, and Natural Resources. The course covers soil physical properties and processes that govern the transport of mass and energy in soils. Major emphasis is on water and solute transport through the vadose zone and their impact on subsurface hydrology and water quality. Specific topics include energy state of soil water, soil water retention characteristics, saturated and unsaturated hydraulic conductivities, Poiseuille and Darcy laws, law of mass conservation, water flow through uniform and layered soils, water infiltration equations, mechanisms of contaminant transport, preferential flow, contaminant adsorption and decay, transport of volatile organic compound, soil thermal properties, steady and non-steady state heat flow, and convective and diffusive gas fluxes. The lectures are supplemented with hands on laboratory exercises on methods of measuring hydraulic, thermal, and gas properties of soils, and methods of characterizing water, contaminants, heat, and gas fluxes in soils. We also have one to two guest lectures from scientists working in the Environmental Consulting Companies and State Agencies.  
Style: 70% Lecture, 30% Laboratory.  
Grading: 30% mid exam, 25% final exam, 25% reports/papers, 20% problem solving.  
Exam Format: multiple choice and identification

Soil 5555 Wetland Soils  
A-F only, 3 credit(s); 1125 or 2125 or equiv or instr consent; Concurrent registration is required (or allowed) in 4511 recommended Credit will not be granted if credit has been received for: ESPM 5555;  
Instructor: Nater, Ed  
Description: Student may contact the instructor or department for information.

Soil 5611 Soil Biology and Fertility
Somali  808 Social Sciences Tower

Somali 1221 Beginning Somali  
A-F only, 5 credit(s);  
Instructor: Ahmed, Said S  
Description: Student may contact the instructor or department for information.

Somali 1225 Accelerated Beginning Somali I  
A-F only, 5 credit(s);  
Instructor: Ahmed, Said S  
Description: Student may contact the instructor or department for information.

Somali 3227 Intermediate Somali I  
A-F only, 5 credit(s);  
Instructor: Ahmed, Said S  
Description: Student may contact the instructor or department for information.

Sonography  University of Minnesota Rochester

Sono 3111 Abdomen I Sonography  
A-F only, 2 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.

Sono 3121 Cross-Sectional Abdominal Anatomy  
A-F only, 1 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.

Sono 3201 Gynecologic Sonography  
A-F only, 2 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.

Sono 3301 Clinical Practicum I  
A-F only, 3 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.

Sono 3311 Vascular Technology  
A-F only, 2 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.

Sono 4111 Ultrasound Physics I  
A-F only, 2 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.

Sono 4201 Pediatric Sonography  
A-F only, 1 credit(s);  
Instructor: Youngs, Diane J  
Description: Student may contact the instructor or department for information.
Sono 4301 Fetal Anomalies
A-F only, 2 credit(s);
Instructor: Youngs, Diane J
Description: Student may contact the instructor or department for information.

Sono 4401 Clinical Practicum IV
A-F only, 7 credit(s);
Instructor: Youngs, Diane J
Description: Student may contact the instructor or department for information.

Sono 4501 Research Project & Publication
A-F only, 1 credit(s);
Instructor: Youngs, Diane J
Description: Student may contact the instructor or department for information.

Spanish 214 Folwell Hall

Span 144 Intermediate Medical Spanish
S-N only, 0 credit(s);
Instructor: Lopez, Maria Emilce
Description: This course is designed to help health care professionals communicate with patients who speak Spanish. Following the course, the student will be able to: use basic medical vocabulary in Spanish; ask questions and provide answers in common medical situations in Spanish; conduct patient interviews, medical histories, and physical exams in Spanish; and understand cultural factors impacting health and health care for Chicano/Latino patients.

Span 344 Advanced Medical Spanish
S-N only, 0 credit(s);
Instructor: Lopez, Maria Emilce
Description: This is an advanced course designed to help health care professionals communicate with patients who speak Spanish. This course will further develop and strengthen language skills and cultural awareness. Individual work is done on WebCT and CD-ROM. Activities focus on vocabulary, listening, reading, writing, and exploring cultural issues. This course is partially internet delivered.
Style: In class: Active participation; and Individual work: Variety of assignments and group discussion on WebCT.

Span 1001 Beginning Spanish
5 credit(s);
Instructor: STAFF
Description: This course is strictly for students who have less than two years of high school Spanish. Permission numbers are required in order to register for this course. Students should bring their high school transcripts and an ID card to Folwell Hall 214 to obtain a permission number. Spanish 1001 focuses on the development of communication skills in listening, speaking, reading, and writing. One day a week students will watch "Destinos", an educational television program in Spanish. The text, "Gente" third ed (Tercera) is accompanied by a workbook. Grammar is covered in the homework assignments and reinforced in class with a variety of paired and small group activities. Spanish is spoken almost exclusively in class. Since the majority of class time is devoted to speaking and listening, class attendance is critical.
Style: 5% Lecture, 10% Discussion, 1% Laboratory. Group work, reading and related activities
Grading: 20% final exam, 15% quizzes, 10% class participation, 55% other evaluation. 10% listening and workbook exercises, 15% oral interview type evaluations, 10% written compositions and writing activities, 20% unit exams
Exam Format: All quizzes and tests evaluate listening, reading, vocabulary, grammar & writing. A minumum of multiple choice & true-false items; encourage the use of natural language by using short answers and essays; Two oral interviews.

Span 1002 Beginning Spanish
5 credit(s); 1001 completed at UMNTC, dept consent Credit will not be granted if credit has been received for: SPAN 4022;
Instructor: STAFF
Description: This course is for the student who has completed Spanish 1001 at the University of Minnesota. Upon entering this course, the student should know basic vocabulary and present and past tense forms, that is to say, be familiar with the material between the "Leccion Preliminar" to "Leccion 9" of the text, "Sabias que...?", 3rd ed. Spanish is spoken almost exclusively in class. Spanish 1002 continues to focus on the development of communicative skills: listening, speaking, reading and writing. One day a week students watch "Destinos", an educational television program in Spanish. The text "Sabias que...?", 3rd ed., is accompanied by a workbook and audio tapes that are designed to be studied outside class. The readings in the text have been taken from Spanish
language newspapers and magazines. Grammar is covered in the homework assignments and reinforced in class with a variety of paired and small group activities. Since the majority of class time is devoted to speaking and listening, class attendance is critical.

**Style:** 5% Lecture, 10% Discussion, 1% Laboratory. Group work, reading and related activities

**Grading:** 20% mid exam, 20% final exam, 15% quizzes, 10% class participation, 35% other evaluation. 15% oral interview type evaluations, 10% written compositions and writing activities, 10% listening and workbook exercises

**Exam Format:** All quizzes and tests evaluate listening, reading, vocabulary, grammar and writing. A minimum of multiple choice & true-false items; an effort is made to encourage the use of natural language by using short answers and essays. Two oral interviews.

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**Span 1002 Beginning Spanish**

5 credit(s); 1001 completed at UMNTC, dept consent Credit will not be granted if credit has been received for: SPAN 4022;

**Instructor:** Matos-Schultz,F.

**Description:**

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**Span 1003 Intermediate Spanish**

5 credit(s);

**Instructor:** STAFF

**Description:** This course is for those who have completed Spanish 1022 or 1002 with C- or better, or who have taken two or more years of Spanish in high school and have successfully passed the Entrance Proficiency Test (EPT) for this level. In this course, students build on the communicative speaking, writing, listening and reading skills that were acquired in beginning Spanish. Class activities are carried out almost entirely in Spanish. For the most part, grammar should be studied at home; a small percentage of class time is intended for grammar instruction and practice. Reading skills are developed through the textbook, and writing skills are developed through a variety of writing assignments. Each student will present an oral presentation on a topic related to those covered in the textbook or in class. Because Spanish class is about the only place where a student can practice listening and speaking, class attendance is critical. Partially Online Sections: The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Face to face meeting typically occur on Monday, Wednesday and Thursday. Some weeks require attendance on Tuesday and Friday. Do not schedule work and/or another class for those days. For more information contact: F. Matos-Schultz, or A. Carlson-Lombardi

**Style:** 40% Discussion. communicative activities with language

**Grading:** 30% mid exam, 20% final exam, 15% reports/papers, 10% in-class presentation, 10% class participation, 5% laboratory evaluation, 10% other evaluation. Oral interview

**Exam Format:** Diverse - essay - fill in blank - short answer

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**Span 1003 Intermediate Spanish**

5 credit(s);

**Instructor:** Conrad,Craig

**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policy, fee, and financial aid information. Speaking/comprehension. Developing reading/writing skills based on materials from Spain/Spanish America. Grammar review. Compositions, oral presentations.

**Style:** Online with handwritten exams

**Grading:** 20% mid exam, 20% final exam, 6% quizzes, 20% additional semester exams, 4% class participation. -My Spanish Lab activities (5%) -3 online written and spoken exercises (15%) -Final oral interview (10%)

**Exam Format:** Supervised, in-person exams

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**Span 1003 Intermediate Spanish**

5 credit(s);

**Instructor:** Eiffler,Edward E

**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Speaking/comprehension. Developing reading/writing skills based on materials from Spain/Spanish America. Grammar review. Compositions, oral presentations.

**Style:** Online with handwritten exams

**Grading:** 6% quizzes. -discussions and chats (4%) -My Spanish Lab activities (5%) -3 Mesa Redonda (online written and spoken exercises) (15%) -3 exams (60%) -Final oral interview (10%)

**Exam Format:** Supervised, in-person, (not online) exams.

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**Span 1003 Intermediate Spanish**

5 credit(s);

**Instructor:** Wiesinger,Andrew David
Description: Student may contact the instructor or department for information.

Span 1003 Intermediate Spanish
5 credit(s);
Instructor: Jovanovic,Aleksandra
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Speaking/comprehension. Developing reading/writing skills based on materials from Spain/Spanish America. Grammar review. Compositions, oral presentations.
Style: Online with handwritten exams
Grading: 20% mid exam, 20% final exam, 6% quizzes, 20% additional semester exams. Discussions and chats (4%) - My Spanish Lab activities (5%) - 3 online written and spoken exercises (15%) - Final oral interview (10%)
Exam Format: Online with in-person exams

Span 1003 Intermediate Spanish
5 credit(s);
Instructor: Hoffman-Gonzalez, Anne C
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policy, fee, and financial aid information. This course would ideally suit students with 2 years or more of successful Spanish-language study who are seeking a course that incorporates both a review of that material as well as an introduction to new vocabulary and content.
Style: Online with handwritten exams
Grading: 20% mid exam, 20% final exam, 6% quizzes, 20% additional semester exams, 4% class participation. - My Spanish Lab activities (5%) - 3 Mesa Redonda (15%) - Final oral interview (10%)

Span 1004 Intermediate Spanish
5 credit(s); 1003 or EPT placement
Credit will not be granted if credit has been received for: SPAN 1014;
Instructor: STAFF
Description: This course is for those who have successfully passed Spanish 1003 with a C- or have passed the Entrance Proficiency Test (EPT) for this level. This course is a requirement for Spanish 3015. In this course, you will build on the communicative speaking, writing, listening and reading skills that you acquired during the first three semesters of Spanish. The "Conexiones" series, text, lab manual and workbook, are used in class. Class activities are carried out almost entirely in Spanish. For the most part, grammar should be studied at home; a small percentage of class time is intended for grammar instruction and practice. Reading skills are developed through "Conexiones", and writing skills are developed through process writing, a multi-step writing process which entails composition writing, rewrites, journals, pop-quizzes, etc. You will also prepare and present a debate with other classmates. Because Spanish class is about the only place where you can practice listening and speaking, class attendance is critical. All students in a BA, BFA of BIS degree program in the CLA must take the Language Proficiency Exam (LPE) as a requirement of the course, unless they have already passed the LPE in this or another language. The Partially Online course typically meets three days a week, Monday, Wednesday and Thursday. All sections meet every day the first week of instruction. However, the class will occasionally meet on Tuesdays and/or Fridays for exams, projects, and other special circumstances. NOTE: Students are not to schedule other classes or work during this period because some weeks classes will meet all five days and the instructors expect those 50-minute sections to be available for Spanish on short notice. The web activities are to be done outside of the classroom.
Style: 10% Lecture. 60 - 70% discussion; 20 - 30% listening, writing, testing for comprehension and vocabulary, and peer editing
Grading: 50% quizzes, 10% class participation, 5% laboratory evaluation. 15% written composition; 10% round-table discussion; 10% debate
Exam Format: Exams evaluate listening, reading, vocabulary & grammar, writing & culture. A minimum of multiple choice and true/false items; Encourage the use of natural language by using short answers, short/long essays. 1 debate

Span 1004 Intermediate Spanish
5 credit(s); 1003 or EPT placement
Credit will not be granted if credit has been received for: SPAN 1014;
Instructor: Sanchez-Vargas, Adriana Ximena
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Speaking/comprehension. Developing reading/writing skills based on materials from Spain/Spanish America. Grammar review. Compositions, oral presentations.
Style: Online with handwritten exams and Language Proficiency Exams
Grading: 20% mid exam, 20% final exam, 6% quizzes, 20% additional semester exams, 4% class participation. - My Spanish Lab activities (5%) - 2 Mesas Redondas (15%) - Final oral interview (10%) - Language Proficiency Exam (LPE; on-campus, by appointment) (15%)
Exam Format: Supervised, in-person exams.
Span 1014 Business Spanish
5 credit(s);1003 or [dept consent , instr consent ]Credit will not be granted if credit has been received for: SPAN 1004;
Instructor: STAFF
Description: This course is for those who have successfully passed Spanish 1003 with a C- or have passed the Entrance Proficiency Test (EPT) for this level. In this course, you will build on the communicative speaking, writing, listening and reading skills that you acquired during the first three semesters of Spanish, but with a focus on business vocabulary, report writing skills, proper format for business communications and conversational fluency on trade-related topics. The "Pasajes" series, 4th ed: "Lengua" and Saldo a favor texts are used. Class activities are carried out almost entirely in Spanish. For the most part, grammar should be studied at home; a small percentage of class time is intended for grammar instruction and practice. Because Spanish class is about the only place where you can practice listening and speaking, class attendance is critical. All students in a BA, BFA or BIS degree program in the CLA must take the Graduation Proficiency Test (GPT) as a requirement of the course unless they have already passed the GPT in this or another language.
Style: 10% Lecture. 60% discussion, 30% listening, writing, testing for comprehension and vocabulary, and peer editing, and 10% lecture.
Grading: 40% mid exam, 15% final exam, 15% reports/papers, 10% in-class presentation, 10% class participation, 10% other evaluation. 10% homework
Exam Format: Listening, vocabulary, reading, short essay, grammar

Span 1022 Alternate Second-Semester Spanish
5 credit(s);Placement above 1001Credit will not be granted if credit has been received for: SPAN 4002;
Instructor: STAFF
Description: This class is a first year Spanish course developed for students with previous language experience. The instruction and context are delivered by a combination of in class meetings and a wide range of online activities. The different online components were designed to help you become a more successful language learner by giving you the opportunity to explore different learning modes independently and to provide more exposure to the Spanish language. You will have the opportunity to experience different accents and regional variations, not just your instructor's, as well as a wealth of other authentic materials that would not be readily accessible in a regular classroom. For that reason the course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. The regular class typically meets four days a week and the Technology-enhanced sections typically meet three days a week.. All sections meet every day the first week of instruction NOTE: Students are not to schedule other classes or work on the days that the classes do not meet because some weeks classes will meet all five days and the instructors expect those 50-minute sections to be available for Spanish on short notice. The web activities are to be done outside of the classroom.
Style: 5% Lecture, 10% Discussion, 10% Laboratory. group work, reading and related activities
Grading: 20% final exam, 10% class participation, 10% laboratory evaluation, 25% other evaluation. unit exams,15% oral interview type evaluations, 10% written compositions and journals, 10% listening and workbook exercises
Exam Format: All quizzes and tests evaluate listening, reading, vocabulary, grammar & writing. A minimum of multiple choice & true-false items; encourage the use of natural language by using short answers and essays. Two oral interviews.

Span 1044 Intermediate Medical Spanish
5 credit(s);1003 or equivCredit will not be granted if credit has been received for: SPAN 1004;
Instructor: Lopez,Maria Emilce
Description: Course designed to help health care professionals and/or students pursuing health care field communicate with patients who speak Spanish. Basic Medical vocabulary, questions and answers in common medical situations, vocabulary and phrases to conduct patient interviews and medical history, vocabulary and conversation to conduct physical exams; understanding the Latin American view of health and health care. In terms of the grammatical aspects, the course covers same areas as Spanish 1004; therefore, students planning on taking Spanish 3015 will be prepared to do so. Besides in class activities, and for a better understanding of cultural aspects, students will perform individual work on WebCT and CD-ROM which concentrate on watching and listening, reading and writing about interviews of health care providers who work with Spanish speaking community, and interactions in the target language between doctors and patients. * Evaluation standards: Students will be evaluated on class participation, discussion of course content, exploration of cultural component, therefore class attendance is critical. Evaluation of communicative speaking, writing, listening and reading is done through exams, composition writing and presentation. Application of Learning Technologies: each week online discussion of questions based on readings. The discussion requires thought about how a theme is related to aspects of interaction with the Chicano/Latino population.
Style: 10% Lecture, 60% Discussion. language lab, listening, writing testing for comprehension and vocabulary and peer editing
Grading: 15% reports/papers, 50% quizzes, 10% in-class presentation, 15% class participation, 10% other evaluation. round table discussion
Exam Format: Exams evaluate listening, reading, vocabulary & grammar, writing & culture. A minimum of multiple choice and true/false items; encourage use of natural language by using short answers, short /long reports

Span 1520 Review of Foundations in Spanish


A-F only, 1 credit(s);
Instructor: Henderson Vazquez, Teresa A
Description: Student may contact the instructor or department for information.

**Span 1521 Spanish I**
A-F only, 3 credit(s);
Instructor: Henderson Vazquez, Teresa A
Description: Student may contact the instructor or department for information.

**Span 1910W Freshman Seminar: The Many Faces of Frida Kahlo: Life, Art, and Myth**
3 credit(s); Meets CLE req of Writing Intensive
Instructor: O'Connell, Joanna
Description: The Many Faces of Frida Kahlo: Life, Art, and Myth Mexican artist Frida Kahlo (1907-1954) became internationally famous during her lifetime both for the striking originality of her painting and for the way she chose to live her life through risky, daring acts of self-creation and performance. Since her death she has become a figure of legend, a kind of cult icon and inspiration for some, a merchandising opportunity for others. In this class we will look at many of the various "Frida Kahlos?" out there, using her own work and the work of others: memoirs, biography, novels, films, photo essay, popular art, drama, and even a cookbook! We'll think about how she lived her life through creative acts of painting, dress, performance, and self-reflection, get to know some of fascinating characters who were part of her artistic and political community in Mexico and abroad, and learn about the history of Mexico through her life and art. This course will satisfy the CLE Writing Intensive requirement.
Style: 30% Lecture, 30% Discussion, 10% Small Group Activities, 10% Student Presentation, 20% Web Based. This is a seminar so active participation in class discussions is expected.
Grading: 70% reports/papers, 10% in-class presentation, 20% class participation. Writing projects will include process stages and some peer review

**Span 2521 Spanish III**
A-F only, 3 credit(s);
Instructor: Furness, Ryan C
Description: Student may contact the instructor or department for information.

**Span 3011 Spanish Communication Skills**
4 credit(s);
Instructor: STAFF
Description: This class is designed to further develop and strengthen language skills by integrating in a meaningful and "real world" fashion the student's ability to write, speak, read and understand modern Spanish at a level that is expected of majors and minors. Students will write summaries of lectures given by native speakers, two papers and reader's journals. They will give an oral presentation and read a variety of texts. The class will employ diverse learning techniques -- grammar review, audio exercises, paired work, small group work, all-class discussions, peer editing, and process writing -- to provide students with the appropriate opportunities to enhance their language skills as they learn academic content through the active use of the Spanish language. This course requires a major time commitment on the part of each student registered.
Style: 25% Lecture, 50% Discussion. 15% peer editing, 10% preparing and presenting projects.
Grading: 20% mid exam, 20% quizzes, 10% in-class presentation, 10% class participation. 15% compositions and portfolio, 10% paper, 10% reader's journal, 25% final paper.
Exam Format: Essays and short answers written in Spanish, together with grammar sections.

**Span 3015 Spanish Composition and Communication**
4 credit(s);
Instructor: STAFF
Description: Spanish 3015 is the first of the upper division sequence for Spanish majors and minors. To enroll in this class, a student must have successfully completed Spanish 1004 or Spanish 1014 or Spanish 1044 and a "High Pass" on the LPE is highly recommended. Students who have not taken Span 1004 (or equiv.) at the University of Minnesota must achieve a "high pass" on the LPE to enroll in Spanish 3015. This class is designed to further develop and strengthen the language skills acquired in the foundation courses. Rather than separating the internal disciplines inherent in second language study, this course seeks to integrate in a meaningful and "real world" fashion the student's ability to write, speak, read and understand modern Spanish at a level that is expected of majors and minors. Students will generate a series of creative and original compositions and will read a variety of texts from both Spain and Latin America. The class will employ diverse learning techniques -- grammar review, audio tape exercises, paired work, small group work, all class discussions, oral presentations, peer editing, process writing -- to provide students with the appropriate opportunities to enhance their language skills as they learn academic content through the active use of the Spanish language. This course requires a major time commitment on the part of each student registered.
Style: 25% Lecture, 50% Discussion. 15% peer editing, 10% preparing and presenting projects
Grading: 15% class participation. 5% participation in peer editing groups, 30% compositions and portfolio, 20% examinations, 10% reader's journal, 10% round-table discussion, 10% final research paper
Exam Format: Essays and short answers written in Spanish, together with grammar sections.

Span 3104W Introduction to the Study of Hispanic Literatures
A-F only, 3 credit(s); 3015, Spanish [major or minor] Credit will not be granted if credit has been received for: TLDO 3104W;Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course aims to introduce students to basic concepts of literary criticism and analysis through reading, discussing and writing about a variety of texts in Spanish. These will broadly represent a range of genres, periods, and styles. As this a writing-intensive course, it will include regular practice of composition and revision of written Spanish as a means of interpreting and responding to literary texts.

Span 3105W Introduction to the Study of Hispanic Cultures
3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Span 3107W Introduction to the Study of Hispanic Linguistics
3 credit(s); 3015, Spanish major or minor Credit will not be granted if credit has been received for: TLDO 3107W; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Span 3211 Discourses of Imperial Spain, 1492-1800
3 credit(s); 3015, [3104W or TLDO 3104 or VENZ 3104 or instr consent ] Credit will not be granted if credit has been received for: TLDO 3211;
Instructor: Spadaccini, Nicholas
Description: This course will examine a series of brief texts from Spain's early-modern period, especially the sixteenth and seventeenth centuries, also known as the Renaissance and Baroque periods. Presentations and discussions will cover a broad range of materials ranging from writing on the so-called "New World" to representations of issues and topics such as poverty, honor and lineage, history and fiction, love, marriage, subjectivity, and so on. These discussions will be organized around canonical texts such as Fernando de Rojas' La Celestina; the anonymous Lazarillo de Tormes; brief sections of Cervantes's Don Quijote, well-known poems by major Golden Age writers, and two well-known plays . A detailed syllabus will be made available to students on the first day of classes.
Style: 50% Lecture, 40% Discussion, 10% Student Presentation. (Oral presentation of a literary work in a round-table format)
Grading: 30% mid exam, 40% final exam, 15% in-class presentation, 15% class participation.
Exam Format: Mid-semester and Final take-home examinations dealing with literary/cultural issues raised in the course; questions provided at least ten days prior to respective due dates.

Span 3221 Latin American Colonial Discourses: Empire and Early Modernity
3 credit(s);
Instructor: STAFF
Description: The goal of this course is to provide the student with a firm foundation in the socio-historic context of the Colonial Period including the central preoccupations of the time, a knowledge of the terms in which these concerns were addressed (and by whom), and an idea of the major scholarly debates today regarding Colonial writings in Latin America. To this end, we will explore Latin American texts (in the broadest sense), discourses, and important figures from pre-contact, ?discovery, ?conquest, and the Baroque ? leading to Independence - with an emphasis on the context of New Spain (today's Mexico). These discussions will be organized around texts such as Indigenous codices; the letters of Christopher Columbus and Hernan Cortes; the encyclopedic works of Bernardino de Sahagun; the controversial writings of Bartolome de las Casas; poetry and other writings by the 10th muse, Sor Juana Ines de la Cruz, and the cirollo posturing of the savant Carlos de Siguenza y Gongora. Additionally, we will discuss the iconic figures of La Malinche and La Virgen de Guadalupe. Some of the concepts / issues to be addressed in the analysis of these texts are: Physical and Epistemological Violence, Divergent Agendas and Interpretations, Resistance and Adaptations, and Silences and Excesses. All writing assignments and class lecture/discussion are in Spanish.
Style: 20% Lecture, 80% Discussion.
Grading: 20% reports/papers, 10% special projects, 30% journal, 10% in-class presentation, 30% class participation. Participation 30%, Intellectual Journal 30%, Oral Presentations/Discussion Leader 10%, Bibliographic Research Project 10%, Final Research Paper 20%
Span 3401 Latino Immigration and Community Service  
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics  
Instructor: Ganley, Kathleen Marie  
Description: In this service-learning course, students reflect on personal and societal ethics as they analyze U.S. power structures associated with emigration from Latin America and issues confronting societies with a rapid demographic change such as has been the case with Latino immigration in the U.S. Students have many opportunities to engage in dialogue with Latino immigrants in their service, a class project and numerous class visits to community organizations. Topics include: the relationship between the global economic system and emigration from Latin America, entry into the U.S. for immigrants with and without documents, federal immigration law, immigration reform, and Latino economic and cultural contributions to the U.S. Students reflect on the societal and individual responsibility to create more inclusive and just political, economic, and educational systems. They are challenged to define and defend their opinions by analyzing systems of social power and privilege in each topic covered. Students will be expected to connect what they are learning to their lives and to the world around them. Students do 33 hours of community service with Latino immigrants; 5 hours of a class project; Students meet 1 time per week for 2.5 hours in a discussion seminar; No tests; Reflection and persuasive papers; average weekly reading - 25 pages

Span 3404 Medical Spanish and Community Health Service  
3 credit(s);  
Instructor: Lopez, Maria Emilce  
Description: Medical Spanish and Community Health Service, an advanced language and culture course, is designed to train Spanish Studies majors/minors to create materials for effective communication with and education of Spanish-speaking patients. In addition, Span 3404 has a service-learning component in which students apply academic knowledge to work done with community health care partners that serve the Chicano/Latino population. It should be noted, however, that students in Span 3404 will but not be involved in direct patient health care.  
Style: 40% Discussion, student centered culture and special purpose language activities.  
Grading: 50% other evaluation. Written reports and journals, online writing activities based on CD-ROM interviews, and development of brochure; 20% class participation and other class assignments such as discussion of readings and unit vocabulary quizzes, 30%  

Span 3501 Roots of Modern Spain and Latin America  
3 credit(s); 3105, TLDO 3105 or VENZ 3512 or instr consent  
Credit will not be granted if credit has been received for: SPAN 3501H;  
Instructor: Viestenz, William R  
Description: Student may contact the instructor or department for information.

Span 3510 Issues in Hispanic Cultures: Contemporary Spain and Challenges of Immigration  
A-F only, 3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Calvo, Maria Antonia  
Description: Topic: Contemporary Spain and the challenges of immigration. In this class through the analysis of immigration in 20th century Spain, students will confront many topics that are common to human migration in different parts of the world. When students understand the paths behind immigration, they are learning about the interaction of different cultures in uneven economic and political situations. As a part of the class work, students will be asked to identify policies that benefit both natural born citizens and immigrants in a specific country. Students will acquire skills to develop immigration policies sensitive to the needs of everyone living in one country. In doing so the students will develop a multicultural perspective that influences public opinion on issues related with immigration, a topic that will continue to be a core issue of the 21st century.  
Exam Format: Essay and short answer

Span 3510 Issues in Hispanic Cultures: Las culturas intimas de la Espa?a medieval  
A-F only, 3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Hamilton, Michelle Marie  
Description: The Arts of Intimacy: Las culturas de la Espana medieval This class is designed as an introduction to the Arab, Jewish and Spanish cultures of medieval Iberia. We will explore how the art, literature, social and political realities of the Iberian Peninsula between 711 and 1492 CE have shaped what Spain is today. Students will select topics to present in class and will develop a final project. Text: The Arts of Intimacy: Christians, Jews and Muslims in the Making of Castilian Culture. Jeri Lynn Dodds, Maria Rosa Menocal and Abigail Krasner Balbale. Yale UP, 2008.  
Style: 50% Lecture, 30% Discussion, 10% Student Presentation

Span 3512 Modern Latin America  
A-F only, 3 credit(s);  
Instructor: Hanneken, Jaime Elizabeth
**Description:** Course concentration will be on major discourses of modernity in Latin America—including Enlightenment, Romanticism, modernismo, positivism, democratization and popular culture, and anti-imperialism—through cultural and literary texts and film. Course requirements include an average of 60 pages of reading per week, 10+ pages of writing and an in-class discussion guide or presentation.

**Style:** 30% Lecture, 30% Discussion, 30% Small Group Activities, 10% Student Presentation.

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**Span 3701 Structure of Spanish: Phonology and Phonetics**

3 credit(s); 3015, [3107W or TLDO 3107 or VENZ 3107 or instr consent ] Credit will not be granted if credit has been received for: SPAN 3701H;

**Instructor:** Face, Timothy L

**Description:** This course aims to provide undergraduate students with an understanding of the basic concepts of phonetics and phonology and to teach them to apply these concepts to Spanish. The course will be both conceptual and practical. The practical component will involve the students using the concepts learned in class to improve their own pronunciation of Spanish. Students will acquire skills in recognizing, producing, and describing in linguistic terms the sounds of Spanish and in understanding and analyzing the Spanish sound system. The conceptual component will involve understanding the relationship between sounds in the Spanish phonological system and studying other factors (linguistic, social, etc.) that influence this system.

**Style:** 50% Lecture, 25% Discussion, 25% Small Group Activities.

**Exam Format:** mixed format

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**Span 3703 Origins and History of Spanish and Portuguese**

3 credit(s);

**Instructor:** Ocampo, Francisco Antonio

**Description:** This course constitutes an introduction to the origins and history of the Spanish language. The focus of the course is modern Spanish and its relationship with Latin. Phonetic, morphologic, syntactic, lexical, and sociolinguistic aspects will be included. Intermediate stages of evolution will not be considered. Teaching methods include: lectures, group activities, problem solving assignments, discussion. Previous knowledge of Latin is not necessary. Course objectives: Give basic theoretical tools to make students understand language change; Give background knowledge about the history of Spanish; Improve the students' own knowledge of the Spanish language; Inform about the linguistic rules that governed the series of changes from Latin to Spanish. Textbook: Resnick, Melvyn. Introduccion a la historia de la lengua espanola. Georgetown University Press, 1981.

**Style:** 40% Lecture, 20% Discussion.

**Group work**

**Grading:** 30% mid exam, 30% final exam, 20% in-class presentation, 10% class participation, 10% problem solving.

**Exam Format:** Essay

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**Span 3706 Spanish Applied Linguistics**

3 credit(s);

**Instructor:** Trimble, John Copin

**Description:** Student may contact the instructor or department for information.

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**Span 3800 Film Studies in Spanish: Visions and Memories in Latin American Cinema**

A-F only, 3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Forcinito, Ana

**Description:** En esta clase se discutira la historia del cine hispanoamericano a través del estudio de las escuelas de cine y los director es mas destacados, con especial atencion al nuevo cine latinoamericano y a sus diversas manifestaciones. En ese sentido el curso esta pensado como una introduccion a los estudios de cine hispanoamericanos, a través de sus films, sus teorias y manifiestos. El enfasis recaera en los procesos politicos e historicos de America Latina, y por lo tanto, en la calidad post (y neo) colonial de sus films y sus industrias cinematograficas. A través del estudio de films representativos nos detendremos a analizar las conexiones entre film y politica y entre los debates culturales y las practicas sociales que acompanan la historia del cine latinoamericano. A través del analisis de la representacion visual y auditiva del genero, la clase social, la raza y la etnia revisaremos a la mirada cinemtica como ? mirada de relacion? y estudiaremos su vinculo con el poder y la opresion.

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**Span 3910 Topics in Spanish Peninsular Literature: History and Fiction in Post-Franco Literature**

A-F only, 3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Ferran, Ofelia

**Description:** Student may contact the instructor or department for information.

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**Span 3920 Topics in Spanish-American Literature**

A-F only, 3 credit(s), max credits 9, 3 completions allowed; 3015, [3104W or TLDO 3104 or VENZ 3104 or instr consent ] Credit will not be granted if credit has been received for: SPAN 3920H;

**Instructor:** O'Connell, Joanna
Description: "Emergent digital practices in the Spanish and Portuguese-speaking world: changing historical contexts, contemporary explorations" Course Description: Students will link new developments in interactive Computer Mediated Communication (CMC) practices with the history of literacy and signification technologies from the precolonial period to the present in Latin America. Topics will include: precolonial and colonial indigenous writing; the arrival and uses of European alphabetic literacy practices; writing and literature in colonial and nation-building projects; press, print, and contemporary mass media; emerging digital practices. In the first half of the class, students will learn about the variety and history of reading and writing practices in the Americas. In the second half, we will research and explore together the impact of emerging digital practices in the Spanish and Portuguese-speaking world, as they mediate highly localized cultural practices in the global digital arena. The class will be conducted in Spanish. Students will speak, read and write in Spanish in the class. Students of Portuguese will have the opportunity to carry out projects in that language. We will explore the concept of "digital literacy" and examine the use of a variety of social media tools.

Style: 20% Lecture, 20% Discussion, 20% Laboratory, 20% Small Group Activities, 20% Web Based. Active participation in research and writing tasks is required on a weekly basis.

Grading: 15% mid exam, 15% final exam, 15% reports/papers, 15% written homework, 10% attendance, 15% journal, 15% in-class presentation.

Exam Format: identifications, short answers, short essay

Span 3972W Graduation Seminar
A-F only, 3 credit(s); 31 cr of 3xxx, instr consent Credit will not be granted if credit has been received for: SPAN 3972V; Meets CLE req of Writing Intensive
Instructor: Ferran, Ofelia
Description: Student may contact the instructor or department for information.

Span 3972W Graduation Seminar
A-F only, 3 credit(s); 31 cr of 3xxx, instr consent Credit will not be granted if credit has been received for: SPAN 3972V; Meets CLE req of Writing Intensive
Instructor: Ramos-Garcia, Luis A
Description: Student may contact the instructor or department for information.

Span 4001 Beginning Spanish
2 credit(s);
Instructor: STAFF
Description: This course is strictly for students who have less than two years of high school Spanish. Permission numbers are required in order to register for this course. Students should bring their high school transcripts and an ID card to Folwell Hall 214 to obtain a permission number. Spanish 1001/4001 focuses on the development of communication skills in listening, speaking, reading, and writing. One day a week students will watch "Destinos", an educational television program in Spanish. The text, "Gente" third ed (Tercera) is accompanied by a workbook. Grammar is covered in the homework assignments and reinforced in class with a variety of paired and small group activities. Spanish is spoken almost exclusively in class. Since the majority of class time is devoted to speaking and listening, class attendance is critical.

Span 4003 Intermediate Spanish
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Span 4004 Intermediate Spanish
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Span 4022 Alternate Second-Semester Spanish
2 credit(s); Grad student Credit will not be granted if credit has been received for: SPAN 1002;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Span 5108 Don Quixote
3 credit(s);
Instructor: Spadaccini, Nicholas
Description: Cervantes' DON QUIJOTE (1605;1615) is examined in connection with the following issues: 1) the critical/theoretical questions connected to the reception of several types of fiction during the Renaissance and early Baroque periods; 2) the novel's
complex dialogue with the dominant sociopolitical discourses of its time and the inclusion within the narrative of various kinds of hybrid
cultural forms, including languages, gender, ethnicity, and race; and, 3) present-day debates between scholars who adhere to
traditional humanist and/or historicist readings and critics whose work is informed by avant-garde, poststructuralist theory. In addition
to reading DON QUIJOTE and some select bibliography, students are also be expected to comply in timely fashion with the following,
additional requirements: 1) Review either a major book or several essay(s) focusing on one or more of the topics to be discussed in
class (approximately 7-8 pages). A format for reviews as well as a precise schedule of presentation (oral and written) will be discussed
at our first meeting. (15%) 2) Participate actively in class discussions. (20%) 3) Deliver a fifteen-minute summary of her/his reflections
on the course (approximately 7-8 pages) during the last two weeks of classes. A final version of the same should be handed in to the
instructor with the final exam. (15%) *This class is geared to graduate students and exceptional undergraduates

**Style:** 50% Lecture, 50% Discussion.

**Grading:** 50% final exam, 30% reports/papers, 20% class participation.

**Exam Format:** A take-home final examination consisting of two questions (10 pages per question) which should reflect a careful
reading of DON QUIJOTE and the theoretical/critical issues surrounding it. (50%)

### Span 5529 The Impact of Globalization in Latin American Discourses

**3 credit(s);**

**Instructor:** Ramos-Garcia, Luis A

**Description:** During the second half of the XX Century and the first years of the new century, discourses on global studies and human
rights increasingly became some of the most controversial issues within Latin American discourses such as narrative, poetry, and
drama studies. And yet, this hermeneutical approach did not resolve many tensions and contradictions embodied in various literary
contexts introduced by postmodernist thinkers, writers and playwrights. By way of in-depth analysis and constant reflection, this course
will attempt to explore recent fictional, theatrical, and theoretical works on the politics of globalization, human rights and gender issues, in
a manner that will move beyond traditional and simplistic interpretations of nationalistic and/or critical discourses. In this way,
abandoning the magical realism literary movement typical of the sixties, this course will study the main features of the recent McOnDo
generation (Roberto Bolaño, Edmundo Paz Soldan, Jorge Volpi, Mempo Giardinelli, Marjorie Agosin, Laura Restrepo) as it
problematizes and proposes a strong, ideologic association of mass communications media cultural and narrative languages with the
modernity of continental urban living. Although, the realistic narratives of McOnDo literature refer and allude to the popular cultures of
contemporary Latin America as lived in its cities, shantytowns and suburbs, its gritty, hard-boiled depictions of poverty and crime prefer
to examine a society heavily influenced by pervasive economic practices generated by a globalization movement, interested in
increasing social class differences, and class struggle. Until recently much of the intellectual discussion on global studies influence,
overlooked the counter movement tendency experienced by recent writing while adopting anthropological and axiological approaches
moving beyond reified notions of 'culture', heavily influenced by global conceptualizations of power. Based on recent theoretical works
on literary theory, drama, and human rights theory this course will attempt to come to a more nuanced understanding of the politics of
globalism, and of the discussion of the limits of global discourses within various political discourses where Latin American Human
Rights have become central to their definitions.

**Grading:** 20% mid exam, 40% final exam, 20% additional semester exams, 10% in-class presentation, 10% class participation. Take-
home Midterm Exam I: 20% Take-home Midterm Exam II: 20% Oral presentation: 10% Participation: 10% Final Essay: 40%

### Span 5714 Theoretical Foundations of Spanish Syntax

**3 credit(s);**

**Instructor:** Ocampo, Francisco Antonio

**Description:** The structure of modern Spanish: Syntax. The course discusses linguistic notions present in the syntax of Spanish, such
as: discrete and prototypic categorization, grammaticalization, grammatical relations, flow of information, transitivity. The discussion is
centered in the possible explanatory role of these notions vis-a-vis syntactic phenomena in Spanish, such as: word order, hypotaxis,
parataxis, clitics, discourse particles. The content is theoretical and students are expected to come to class with an adequate
knowledge of Spanish grammar. The target audience are graduate students. Required readings: Taylor. _Linguistic Categorization_;
and excerpts from various authors.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 30% mid exam, 30% final exam, 40% problem solving.

**Exam Format:** essay

### Span 5930 Topics in Ibero-Romance Linguistics

**3 credit(s), max credits 9, 3 completions allowed;**

**Instructor:** Face, Timothy L

**Description:** This course will focus on the phonological study of Spanish intonation. After beginning with an introduction to most
widespread theory of intonational phonology, including how it has been applied to Spanish generally, we will examine various more
specific topics. Examples of these topics are the intonation of specific utterance types (e.g., declaratives, interrogatives, imperatives)
as well as such things as focus, stylistic variation, phrasing, and language contact. Throughout the course we will examine many of the
topics that have been addressed in existing scholarship, as well as note where there is a need for further investigation. In addition to
gaining knowledge of existing research on intonational phonology, and specifically on Spanish intonation, students will learn the basic
skills for analyzing intonation and will conduct a research project of their own on a topic chosen in consultation with the instructor.

Span 5970 Directed Readings
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: STAFF
Description:

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: O'Connell, Joanna
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Ferran, Ofelia
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Ocampo, Francisco Antonio
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Spadaccini, Nicholas
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Klee, Carol Anne
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Ramos-Garcia, Luis A
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Face, Timothy L
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Forcinito, Ana
Description: Student may contact the instructor or department for information.

Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Hanneken, Jaime Elizabeth
Description: Student may contact the instructor or department for information.
Span 5990 Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Hamilton, Michelle Marie
Description: Student may contact the instructor or department for information.

Span 8710 Seminar in Spanish and Portuguese Phonology: Spanish Intonational Phonology
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Face, Timothy L
Description: This course will focus on the phonological study of Spanish intonation. After beginning with an introduction to most widespread theory of intonational phonology, including how it has been applied to Spanish generally, we will examine various more specific topics. Examples of these topics are the intonation of specific utterance types (e.g., declaratives, interrogatives, imperatives) as well as such things as focus, stylistic variation, phrasing, and language contact. Throughout the course we will examine many of the topics that have been addressed in existing scholarship, as well as note where there is a need for further investigation. In addition to gaining knowledge of existing research on intonational phonology, and specifically on Spanish intonation, students will learn the basic skills for analyzing intonation and will conduct a research project of their own on a topic chosen in consultation with the instructor.

SpPt 3256 Latin American Cultural Discourse
3 credit(s); SPAN 3015 Credit will not be granted if credit has been received for: SPPT 3256H;
Instructor: STAFF
Description: This course will focus on Latin American short stories, from Brazil and from Spanish-speaking countries. Discussions will center around three main areas: (a) important and challenging themes, including the body, relationships, sex, repression, death, justice, childhood, parenthood, loss and social conflicts; (b) formal aspects, such as space, time, vocabulary, point of view; (c) contextual elements, including patriarchal society, authoritarian politics, conservative modernization and post-colonial culture. Some classes will be dedicated to the study of the double, literary fragmentation and the problem of realism. Short stories included in the course are by such writers as Jorge Luis Borges, Julio Cortazar, Roberto Bolaño, Clarice Lispector, and Caio Fernando Abreu. More recent writers, who emerged during the last ten years, will be also considered. In addition to short stories, other cultural productions?film, music, fine arts?will be occasionally considered. Students will be required to give regular oral presentations on primary and/or secondary readings and write three 5-7 page short papers in Portuguese or Spanish. Combined SpPt majors must do all coursework in Portuguese.

SpPt 5930 Selected Topics in Hispanic and Lusophone Cultural Discourse: Practicum: Teaching of College-level Span and Port
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Villar PhD, Susan McMillen
Description: Student may contact the instructor or department for information.

SpPt 5930 Selected Topics in Hispanic and Lusophone Cultural Discourse: Work of Translation: Theory, Function, Practice
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Allen, Joseph R
Description: Student may contact the instructor or department for information.

SpPt 5999 The Teaching of College-Level Spanish: Theory and Practice
3 credit(s);
Instructor: Melin, Charlotte Ann
Description: Student may contact the instructor or department for information.

Speech-Language-Hearing Sciences
115 Shevlin Hall

SLHS 1301V Physics & Bio Honors
A-F only, 4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Introduction to the physics and biology of spoken language; the talker's production of sounds and words; transmission of sound; the listener's perception of what was heard; and computer analysis and synthesis of speech. Lectures will be supported by computer animations that show, in slow motion, rapidly changing dynamic events in acoustics, by on-line computer analysis of speech, and by laboratory sessions. Objectives: 1) Provide students who have a limited physics and biology background with an introduction to
the physics and biology of spoken language, a field that is not only interesting, but of considerable social importance because of the dominant role that speech, language, and hearing play in society; and 2) Introduce students to recent technological advances associated with spoken language such as digital signal processing systems and speech recognition techniques. The trek through history will begin with Kratzenstein, who designed the first speech synthesizer in 1179, and end with an examination of the ways in which current research from disciplines such as physics, biology, psychology, linguistics, speech and hearing science, and so forth contributes to our understanding of the physics and biology of spoken language.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 50% mid exam, 25% final exam, 25% laboratory evaluation.

**Exam Format:** multiple choice

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**SLHS 1301W The Physics and Biology of Spoken Language**

4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** Introduction to the physics and biology of spoken language; the talker's production of sounds and words; transmission of sound; the listener's perception of what was heard; and computer analysis and synthesis of speech. Lectures will be supported by computer animations that show, in slow motion, rapidly changing dynamic events in acoustics, by on-line computer analysis of speech, and by laboratory sessions.

Objectives: 1) Provide students who have a limited physics and biology background with an introduction to the physics and biology of spoken language, a field that is not only interesting, but of considerable social importance because of the dominant role that speech, language, and hearing play in society; and 2) Introduce students to recent technological advances associated with spoken language such as digital signal processing systems and speech recognition techniques. The trek through history will begin with Kratzenstein, who designed the first speech synthesizer in 1179, and end with an examination of the ways in which current research from disciplines such as physics, biology, psychology, linguistics, speech and hearing science, and so forth contributes to our understanding of the physics and biology of spoken language.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 50% mid exam, 25% final exam, 25% laboratory evaluation.

**Exam Format:** multiple choice

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**SLHS 1302 Rate Your World: Quantifying Judgments of Human Behavior**

3 credit(s); Meets CLE req of Mathematical Thinking

**Instructor:** STAFF

**Description:** This course will allow students with little mathematics background to learn basic quantitative methods as they apply to measuring human behavior. Introductory mathematical principles will be applied to measuring behaviors such as: rating personality and attention, evaluating infant speech perception, studying opinion polls, measuring voice and sound, and quantifying speech recognition through cochlear implants. Material will be presented using a mixture of lecture and hands-on activities in class. Mid-term and final examinations will focus on lecture material. In-class activities will be analyzed and written into short reports.

**Style:** 40% Lecture, 30% Discussion, 30% Laboratory.

**Grading:** 25% mid exam, 25% final exam, 50% reports/papers.

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**SLHS 1401 Communication Differences and Disorders**

3 credit(s); Credit will not be granted if credit has been received for: SLHS 3401; Meets CLE req of Social Sciences

**Instructor:** STAFF

**Description:** Human communication is a complex interpersonal process that involves speech, language, and hearing. These three aspects of communication are made up of neurological, cognitive, sensory, anatomical, and physiological components, which come together and develop within social contexts. Functional communication skills are necessary to successfully participate in all aspects of society and any breakdown in speech, language or hearing will have an impact on one's daily life-at home, school, work, and/or community settings. In order to determine if a communication disorder exists, we need to have a clear understanding of what constitutes "normal" communication. The definition of what is normal or acceptable speech, language, and hearing behavior may vary according to age, gender, language or dialectal background, and culture. Thus, these factors must be considered when identifying and treating communication disorders. This course will survey a range of communication disorders affecting children and adults, and will explore the origin, assessment, and treatment of these disorders within the context of normal human variation. Reference to the professional fields of speech-language pathology and audiology will be given throughout the semester.

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**SLHS 1402 The Talking Brain**

3 credit(s); Meets CLE req of Social Sciences

**Instructor:** Zhang, Yang

**Description:** his ENTRY-LEVEL course deals with a quintessential aspect of human nature - how the brain supports language. Topics include (a) basic knowledge on anatomy and physiology of neural network involved in producing and understanding speech and language, (b) basic knowledge on the acoustic features of spoken language and sound patterns of language, (c) basic knowledge on the structure of language and language acquisition, (d) modern brain research techniques and the hot topics in cognitive neuroscience.
of language and music, (e) Research findings from normal populations (the developing brain, mature brain, aging brain, bilingual brain) and clinical populations (aphasia, amusia, dyslexia, central auditory processing disorder, autism spectrum disorder, language-specific impairment). Theoretical importance, empirical limitation, and societal impacts of the research findings will be discussed. Sample syllabus is available at: http://zhanglab.wikidot.com/teaching

**Style:** 60% Lecture, 5% Film/Video, 10% Discussion, 10% Laboratory, 5% Small Group Activities, 10% Demonstration.

**Grading:** 25% mid exam, 25% final exam, 30% reports/papers, 10% quizzes, 10% class participation.

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**SLHS 3302 Anatomy and Physiology of the Speech and Hearing Mechanisms**

- **3 credit(s);**
- **Instructor:** STAFF
- **Description:** Student may contact the instructor or department for information.

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**SLHS 3303 Language Acquisition and Science**

- **3 credit(s);**
- **Instructor:** Reichle, Joe E
- **Description:** Course Objectives: At the completion of this 3-credit course, students should be able to: 1. Describe the emergence of basic communicative and conversational functions 2. Describe the development of vocal and gestural communicative means among infants and toddlers 3. Describe quantitative and qualitative aspects of vocabulary acquisition 4. Describe the development of pragmatic skills in the preschool and school years 5. Describe the development of semantic skills in the preschool and school years 6. Describe the development of morphology and syntax in the preschool/school years 7. Identify the major theoretical approaches to language acquisition 8. Be familiar with frequently occurring areas of communicative differences, delays and disorders
- **Style:** 100% Lecture.
- **Grading:** 4% quizzes. Four exams that are weighted equally.

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**SLHS 3305W Speech Science**

- **3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Watson, Peter J
- **Description:** Student may contact the instructor or department for information.

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**SLHS 3401 Communication Differences and Disorders**

- **3 credit(s); Credit will not be granted if credit has been received for: SLHS 1401; Meets CLE req of Social Sciences**
- **Instructor:** STAFF
- **Description:** Human communication is a complex interpersonal process that involves speech, language, and hearing. These three aspects of communication are made up of neurological, cognitive, sensory, anatomical, and physiological components, which come together and develop within social contexts. Functional communication skills are necessary to successfully participate in all aspects of society and any breakdown in speech, language or hearing will have an impact on one’s daily life—at home, school, work, and/or community settings. In order to determine if a communication disorder exists, we need to have a clear understanding of what constitutes “normal” communication. The definition of what is normal or acceptable speech, language, and hearing behavior may vary according to age, gender, language or dialectal background, and culture. Thus, these factors must be considered when identifying and treating communication disorders. This course will survey a range of communication disorders affecting children and adults, and will explore the origin, assessment, and treatment of these disorders within the context of normal human variation. Reference to the professional fields of speech-language pathology and audiology will be given throughout the semester.

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**SLHS 3555H Honors Thesis**

- **A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;**
- **Instructor:** Carney, Arlene Earley
- **Description:** Student may contact the instructor or department for information.

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**SLHS 3555H Honors Thesis**

- **A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;**
- **Instructor:** Angerman, Sarah Kay
- **Description:** Student may contact the instructor or department for information.

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**SLHS 3555H Honors Thesis**

- **A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;**
- **Instructor:** Deruiter, Mark
- **Description:** Student may contact the instructor or department for information.
SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Finestack,Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Schlauch,Robert S
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Windsor,Jennifer
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Reichle,Joe E
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Kennedy,Mary R T
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Nelson,Peggy B
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Kohnert,Kathryn
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Munson,Benjamin
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Watson,Peter J
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Zhang,Yang
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Rao,Aparna
Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Sasisekaran, Jayanthi
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Carney, Arlene Earley
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Angerman, Sarah Kay
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Deruiter, Mark
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Finestack, Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Schlauch, Robert S
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Windsor, Jennifer
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Reichle, Joe E
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Kennedy, Mary R T
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Nelson, Peggy B
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Kohnert, Kathryn
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Munson, Benjamin
Description: Student may contact the instructor or department for information.
SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Watson, Peter J
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Zhang, Yang
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Rao, Aparna
Description: Student may contact the instructor or department for information.

SLHS 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Sasisekaran, Jayanthi
Description: Student may contact the instructor or department for information.

SLHS 4301 Introduction to the Neuroscience of Human Communication
3 credit(s);
Instructor: Kennedy, Mary R T
Description: This course is intended to provide students with an overview of neuroanatomy, neurophysiology, and neuroscience pertinent to processes of human communication behavior. Although it is intended for students who are majoring in Speech-Language-Hearing Sciences, students with some science background are welcome to enroll. Emphasis is on structural and functional relationships necessary for speech, language and hearing, although a general knowledge of the nervous system is first required. Topics include: gross anatomy of central and peripheral nervous systems; basic principles of neuroscience; neural embryological development; neuroplasticity; motor and sensory systems; visual and auditory systems; and hemisphere and cortical organization. An overview of current diagnostic techniques and examples of clinical neuropathologies that result in communication disorders are also introduced.
Style: 70% Lecture, 10% Discussion, 20% Laboratory.
Grading: 20% mid exam, 25% final exam, 25% quizzes, 10% laboratory evaluation, 20% other evaluation. 2nd midsemester exam
Exam Format: multiple choice, T/F, short essay, labeling, fill-in-blank

SLHS 4402 Assessment and Treatment in Speech-Language Pathology
A-F only, 3 credit(s);
Instructor: Finestack, Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 4801 Hearing Measurement and Disorders
3 credit(s);
Instructor: STAFF
Description: This course will provide a basic orientation to audiologic assessment and disorders of the auditory system. The course is geared towards undergraduate students majoring in Speech-Language-Hearing Sciences. The anatomy of the ear and the scope of practice in audiology will be reviewed. Emphasis will be placed on the tests used to assess hearing, including pure-tone audiometry and masking, speech audiometry, immittance, electrophysiological tests, pure-tone screening, and pediatric assessment. Various disorders of the outer, middle, and inner ear will be described. Case management for clients with hearing loss will also be discussed. Students will obtain hands-on experience with otoscopic examination, pure tone audiometry, tympanometry, and hearing screening.
Style: 80% Lecture, 10% Discussion. in-class activities
Grading: 50% mid exam, 30% final exam, 10% quizzes, 10% laboratory evaluation.
Exam Format: Multiple choice, completion, and short answer questions

SLHS 5401 Counseling and Professional Issues
3 credit(s);
Instructor: Deruiter, Mark
Description: Basic counseling principles and current professional issues in communication disorders. Application of counseling theory to clinical practice. Analysis of regulation, practice, and future direction of communication disorders.
Style: 80% Lecture, 20% Discussion.
SLHS 5501 Fluency and Phonological Disorders
3 credit(s);
Instructor: Stoeckel, Ruth Ellen
Description: This course discusses the nature, assessment, and treatment of (a) phonological disorders in children (including articulation disorders and childhood apraxia of speech), and (b) fluency disorders in children and adults. At the conclusion of the course, students will be able to conduct supervised assessment and treatment of phonological disorders in children, and supervised assessment and treatment of fluency disorders in children and adults. This course is primarily concerned with functional disorders, i.e., phonological and fluency disorders of an unknown etiology. Disorders with a known organic etiology (e.g., hearing impairment, neuromotor dysfunction, craniofacial anomaly, neurogenic stuttering) will be mentioned briefly, and will be covered in more depth in other courses. Course Objectives. At the conclusion of this course, students will be able to: (1) Describe the normal development of fluency and phonology (2) Describe atypical phonological development (3) Describe the speech of people with fluency disorders (4) Administer and interpret assessments of phonology in children (5) Administer and interpret assessments of fluency in children and adults (6) Select treatment goals and behavioral objectives for children with phonological disorders (7) Select treatment goals and behavioral objectives for children and adults with fluency disorders (8) Develop therapy materials to implement treatment goals and objectives
Style: 70% Lecture, 30% Small Group Activities.
Grading: 50% mid exam, 25% final exam, 25% reports/papers.

SLHS 5501 Fluency and Phonological Disorders
3 credit(s);
Instructor: Sasisekaran, Jayanthi
Description: This course discusses the nature, assessment, and treatment of (a) phonological disorders in children (including articulation disorders and childhood apraxia of speech), and (b) fluency disorders in children and adults. At the conclusion of the course, students will be able to conduct supervised assessment and treatment of phonological disorders in children, and supervised assessment and treatment of fluency disorders in children and adults. This course is primarily concerned with functional disorders, i.e., phonological and fluency disorders of an unknown etiology. Disorders with a known organic etiology (e.g., hearing impairment, neuromotor dysfunction, craniofacial anomaly, neurogenic stuttering) will be mentioned briefly, and will be covered in more depth in other courses. Course Objectives. At the conclusion of this course, students will be able to: (1) Describe the normal development of fluency and phonology (2) Describe atypical phonological development (3) Describe the speech of people with fluency disorders (4) Administer and interpret assessments of phonology in children (5) Administer and interpret assessments of fluency in children and adults (6) Select treatment goals and behavioral objectives for children with phonological disorders (7) Select treatment goals and behavioral objectives for children and adults with fluency disorders (8) Develop therapy materials to implement treatment goals and objectives
Style: 70% Lecture, 30% Small Group Activities.
Grading: 50% mid exam, 25% final exam, 25% reports/papers.

SLHS 5603 Language and Cognitive Disorders in Children
3 credit(s);
Instructor: Finestack, Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 5801 Audiologic Assessment I
3 credit(s);
Instructor: Schlauch, Robert S
Description: The first few weeks of this course will build upon the knowledge acquired in your introductory course in Audiology. You will be expected to know fine details about test procedures and test interpretation, including understanding the content of journal articles from your readings that address these issues. An important part of the transition from undergraduate to graduate study is to know how to support your clinical decisions and the procedures you select with journal citations. Audiologic Assessment II, the second course in the sequence, will introduce material that is not presented in any detail in most undergraduate curricula if it is presented at all. This course will emphasize physiological measures, such as ABR and otoacoustic emissions. Laboratory exercises are designed to complement the lectures in these areas. By the end of this two-course sequence, you will have a strong foundation in auditory diagnosis using both behavioral and physiological measures. The laboratory exercises and practical exams are designed to provide you with the skills to enter a practicum in a medical setting with adults. Audiologic Assessment III, a course that emphasizes balance function, will complete the series. After successful completion of this course you will be able to: 1) perform independently a basic audiologic assessment on an adult client. This includes case history, otoscopy, tuning fork tests, pure tone audiometry, masking, word recognition performance for monosyllabic words, and the aural acoustic immittance battery. 2) Determine the need for selecting an
assessment tool from the basic battery of tests listed above 3) Know how to interpret the results for the basic battery of audiometric tests for persons with normal hearing and impaired hearing 4) Know the effectiveness and precision of various tests in the basic battery based on results from scientific studies published in peer-reviewed journals

SLHS 5802 Hearing Aids I
3 credit(s);
Instructor: Gregan,Melanie J
Description: Student may contact the instructor or department for information.

SLHS 5803 Hearing Loss in Children: Diagnosis
3 credit(s);
Instructor: Rao,Aparna
Description: This course will focus on the diagnosis of auditory disorders in infants and children. Topics covered will include embryologic and physiologic development of the auditory system, genetics of hearing loss and non-genetic causes of hearing loss. Students will learn about hearing testing using behavioral and physiological measures. Newborn hearing screening will be discussed as well.
Style: 50% Lecture, 10% Film/Video, 10% Discussion, 15% Small Group Activities, 15% Demonstration.
Grading: 25% mid exam, 25% final exam, 30% special projects, 10% quizzes, 10% in-class presentation.

SLHS 5807 Noise and Hearing Conservation
A-F only, 3 credit(s);
Instructor: Nelson,Peggy B
Description: Student may contact the instructor or department for information.

SLHS 5810 Laboratory Module in Audiology
1-2 credit(s), max credits 5, 5 completions allowed;
Instructor: Sullivan,Michael Joseph
Description: Student may contact the instructor or department for information.

SLHS 5820 Clinical Research and Practice: Grand Rounds
S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Schlauch,Robert S
Description: Student may contact the instructor or department for information.

SLHS 5830 Clinical Foundations in Audiology
S-N only, 1-8 credit(s), max credits 24, 24 completions allowed;
Instructor: Rao,Aparna
Description: Student may contact the instructor or department for information.

SLHS 5900 Topic in Speech-Language-Hearing Sciences
1-4 credit(s), max credits 8;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

SLHS 5993 Directed Study
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

SLHS 8430 Proseminar in Speech-Language-Hearing Sciences
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Nelson,Peggy B
Description: Student may contact the instructor or department for information.

SLHS 8720 Clinical Education in Speech-Language Pathology
S-N only, 1-8 credit(s), max credits 24, 24 completions allowed;
Instructor: Deruiter,Mark
Description: Student may contact the instructor or department for information.
SLHS 8803 Signals and Systems in Audiology
3 credit(s);
Instructor: Schlauch, Robert S
Description: Student may contact the instructor or department for information.

SLHS 8820 Clinical Education in Audiology
S-N only, 1-8 credit(s), max credits 24, 24 completions allowed;
Instructor: Deruiter, Mark
Description: Student may contact the instructor or department for information.

SLHS 8840 Audiology Externship
S-N only, 1-7 credit(s), max credits 7, 3 completions allowed;
Instructor: Deruiter, Mark
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Carney, Arlene Earley
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Angerman, Sarah Kay
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Deruiter, Mark
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Finestack, Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Schlauch, Robert S
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Windsor, Jennifer
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Reichle, Joe E
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Kennedy, Mary R T
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Nelson, Peggy B
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Kohnert, Kathryn
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Munson, Benjamin
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Watson, Peter J
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Zhang, Yang
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Rao, Aparna
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Sasisekaran, Jayanthi
Description: Student may contact the instructor or department for information.

Sport Management 220 Cooke Hall

SMgt 1701 Introduction to Sport Management
A-F only, 2 credit(s);
Instructor: Richardson, Tiffany
Description: Scope/motive of the study of sport from sociological, psychological, historical, economic, and scientific perspective. Issues in sport.

SMgt 3111 Sports Facility and Event Management
A-F only, 3 credit(s);
Instructor: STAFF
Description: Aspects of managing sport facilities/events. Conceptualization of sports events. Event management planning process, budgeting, site selection, booking, ticketing, sponsorship.

SMgt 3143 Organization and Management of Sport
A-F only, 3 credit(s);
Instructor: Shreffler, Megan Beth
Description: Student may contact the instructor or department for information.

SMgt 3421 Business of Sport
A-F only, 3 credit(s);
Instructor: Allison JD, Rayla
SMgt 3421 Business of Sport  
A-F only, 3 credit(s);  
Instructor: Lisez, John Phillip Stephen  
Description: Student may contact the instructor or department for information.

SMgt 3501 Sport in a Diverse Society  
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences  
Instructor: STAFF  
Description: Relationship between sport and contemporary social institutions (politics, religion, economics, education, mass media). Emphasizes groups/individuals who have historically been marginalized or excluded from sport participation. Variables such as race, sex, social class, sexual orientation, physical (dis)abilities also emphasized.

SMgt 3601 Ethics and Values in Sport  
A-F only, 2 credit(s);  
Instructor: Schull, Vicki Denise  
Description: Violence, demonstrative behavior, sportsmanship. Ethical issues in playing of sport and in management/governance of sport industry.

SMgt 3631 Sport Marketing  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Fundamental theories/issues in sport marketing, grounded in traditional marketing principles. Unique applications to sport business industry.  
Style: 50% Lecture, 20% Discussion, guest speakers; 15% group projects  
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 10% special projects, 10% in-class presentation.  
Exam Format: varied

SMgt 3632 Sport Sales and Fund-raising  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Foundation of revenue production in sport management. Necessary skills related to revenue production and sales processes as they apply to the business of sport.

SMgt 3861 Legal Aspects of Sport  
A-F only, 3 credit(s);  
Instructor: Loher JD, Vickie Lynn  
Description: Student may contact the instructor or department for information.

SMgt 3881W Senior Seminar in Sport Management  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: STAFF  
Description: Presentations/discussions on sport-related topics of interest.

SMgt 3993 Directed Study in Sport Management  
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;  
Instructor: Buyse PhD, Jo Ann  
Description: Students work with faculty and grad students on research, scholarly, or creative activities. Students assist with faculty scholarship or carry out projects under faculty supervision

SMgt 3993 Directed Study in Sport Management  
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;  
Instructor: Allison JD, Rayla  
Description: Students work with faculty and grad students on research, scholarly, or creative activities. Students assist with faculty scholarship or carry out projects under faculty supervision

SMgt 3993 Directed Study in Sport Management  
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;  
Instructor: Ross PhD, Stephen
Description: Students work with faculty and grad students on research, scholarly, or creative activities. Students assist with faculty scholarship or carry out projects under faculty supervision.

SMgt 3993 Directed Study in Sport Management
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Kihl PhD,Lisa A
Description: Students work with faculty and grad students on research, scholarly, or creative activities. Students assist with faculty scholarship or carry out projects under faculty supervision.

SMgt 3993 Directed Study in Sport Management
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Richardson,Tiffany
Description: Students work with faculty and grad students on research, scholarly, or creative activities. Students assist with faculty scholarship or carry out projects under faculty supervision.

SMgt 3996 Practicum: The Sport Experience
S-N only, 2-8 credit(s), max credits 8, 4 completions allowed;
Instructor: Buysse PhD,Jo Ann
Description: This is an experiential learning course where students learn and work in a professional organization outside of the classroom. This course is designed for Sport Studies majors only. It is their final core course. It is similar to an internship, with the exception that practicum credits may be divided between two semesters and also between two sites.
Style: field experience
Grading: 20% reports/papers, 80% other evaluation. Supervisor evaluation of work

Statistics

Stat 1001 Introduction to the Ideas of Statistics
4 credit(s);Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: Introduction to the Ideas of Statistics is a course that teaches the basic ideas of statistics without getting bogged down in equations, Greek letters, and complicated calculations. Conceptual issues, which make the difference between valid and bogus uses of statistics, are faced squarely and not "dumbed down" but the mathematics is kept simple and explained in plain English, graphs, and diagrams. Topics covered are design of experiments (what makes a valid scientific experiment), descriptive statistics (histograms, the bell-shaped curve, and all that), regression and correlation, probability and the law of averages, chance variability of statistical estimates, the accuracy of polls and sample surveys, and the use of data as evidence in testing and plausibility of claims made about populations.
Style: 75% Lecture, 25% Laboratory.
Grading: 40% mid exam, 40% final exam, 20% problem solving.
Exam Format: essay, problem solving and multiple choice

Stat 3011 Introduction to Statistical Analysis
4 credit(s);Credit will not be granted if credit has been received for: STAT 5021;Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: This course provides an introduction to basic methods of statistics, including descriptive statistics, elementary probability ideas and random variables, distributions of sample averages. One and two sample t-procedures, simple linear regression, basic ANOVA. The target audience is undergraduates from all majors. Stat 3011 and Stat 3021 are both entry courses into the statistics curriculum for undergraduates.
Exam Format: problem solving

Stat 3021 Introduction to Probability and Statistics
3 credit(s);
Instructor: STAFF
Description: This course will start with an introduction of probability, including interpretations of probability, axioms of probability, and the use of counting methods for solving probability problems, conditional probability, Bayes theorem, independence, random variables and distributions, expected values, the binomial, Poisson, normal and other distributions, the law of large numbers, and the central limit theorem. Then we will cover applications of the above to the theory of statistical inference, including estimation, confidence intervals, and hypothesis tests.
Style: 100% Lecture.
Grading: 45% mid exam, 45% final exam, 10% problem solving.
**Exam Format:** Problem solving

**Stat 3022 Data Analysis**
- **4 credit(s);**
- **Instructor:** STAFF
- **Description:** Further topics in regression and ANOVA; non-parametric methods; model selection and verification; writing statistical reports; use of statistical software; additional selected topics.

**Stat 4101 Theory of Statistics I**
- **4 credit(s);** Math 1272
- **Instructor:** Bezener, Martin A
- **Description:** Student may contact the instructor or department for information.

**Stat 4893W Senior Paper**
- **1 credit(s);** Meets CLE req of Writing Intensive
- **Instructor:** STAFF
- **Description:** STAT 4893W is a requirement for a BA in Statistics in CLA. It also fulfills the University requirement of a Writing Intensive course in the major. It can be satisfied in several ways including but not limited to directed study culminating in a paper on a specialized area of Statistics (most common choice), carrying out a "case study" involving data collection and analysis and a report, and writing and documenting a computer program to implement a nontrivial statistical technique. Students should enroll in any semester of their Senior year. If work is unfinished at semester end (as frequently happens), an incomplete (I) is usually granted. The topic of the paper should be chosen in consultation with a Statistics faculty supervisor. Frequently this faculty member will be the student's instructor in STAT 5xxx, and the paper will build from the course. See http://www.stat.umn.edu/ugrad/stat4893.html for more information.
- **Grading:** 100% reports/papers.

**Stat 5021 Statistical Analysis**
- **4 credit(s);** credit will not be granted if credit received for: 3011; College algebra or instr consent; Stat course recommended
- **Instructor:** STAFF
- **Description:** The primary audience for this course is graduate students in non-statistics-major programs who need statistical competence. Typical needs would be the analysis of data using common statistical methods, the design of single-factor experiments and the ability to read journal articles and assess their statistical content critically. After completion of the course, students are able to carry out one-and-two sample tests, set up confidence intervals for means, proportions and differences in means and proportions. They can fit single-predictor regressions and one-way analysis of variance, along with checks of the model assumptions underlying these methods. The course includes a brief non-calculus introduction to probability theory and statistical distributions.
- **Style:** 50% Lecture, 25% Discussion, 25% Laboratory.

**Stat 5101 Theory of Statistics I**
- **4 credit(s);** Math 2263 or MATH 2374
- **Instructor:** Liu, Xin
- **Description:** Student may contact the instructor or department for information.

**Stat 5302 Applied Regression Analysis**
- **4 credit(s);**
- **Instructor:** Price, Brad
- **Description:** Student may contact the instructor or department for information.
Stat 5303 Designing Experiments
4 credit(s);
Instructor: Oehlert, Gary W
Description: This course covers basic experimental designs, when to use them, and how to analyze the results. We cover: completely randomized designs, factorial treatment structures, random and mixed effects models, complete and incomplete blocks, covariates, split plots, and (sometimes) response surfaces. Primarily lecture based, with discussion and computer work in the lab. This course is aimed at nonstatistics graduate students, but advanced undergraduates can also attend.
Style: 90% Lecture, 10% Demonstration.
Grading: 40% mid exam, 25% final exam, 15% special projects, 20% written homework.
Exam Format: problem solving

Stat 5421 Analysis of Categorical Data
3 credit(s);
Instructor: Rothman, Adam Joseph
Description: Student may contact the instructor or department for information.

Stat 5601 Nonparametric Methods
3 credit(s);
Instructor: Chatterjee, Singdhansu Bhusan
Description: Student may contact the instructor or department for information.

Stat 5993 Tutorial
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Students may contact the department for information.

Stat 8051 Applied Statistical Methods 1: Computing and Generalized Linear Models
A-F only, 4 credit(s);
Instructor: Qiu, Peihua
Description: Student may contact the instructor or department for information.

Stat 8053 Applied Statistical Methods 3: Multivariate Analysis and Advanced Regression
A-F only, 4 credit(s);
Instructor: Weisberg, Sanford
Description: Student may contact the instructor or department for information.

Stat 8101 Theory of Statistics 1
4 credit(s);
Instructor: Jiang, Tiefeng
Description: Student may contact the instructor or department for information.

Stat 8111 Mathematical Statistics I
3 credit(s);
Instructor: Wang, Lan
Description: Student may contact the instructor or department for information.

Stat 8913 Literature Seminar
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Meeden, Glen Dale
Description: Student may contact the instructor or department for information.

Stat 8931 Advanced Topics in Statistics: Quality and Statistical Process Control
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Qiu, Peihua
Description: Student may contact the instructor or department for information.

Stat 8932 Advanced Topics in Statistics: Nonparametric Function Estimation & Model Selection
Stem Cell Biology  

**Stem Cell 5051 Stem Cell Biology Practical Training Module**

A-F only, 1 credit(s);  
Instructor: Slack, Jonathan M W  
Description: This is a one credit course that is an integral part of the M.S. in Stem Cell Biology. It is not open to students on other programs. This is an Intensive two-week course that provides hands-on instruction in techniques of tissue culture, conventional, fluorescence, and confocal microscopy, and flow cytometry for both analysis of cell populations and sorting of cells.  
Style: 100% Laboratory.  
Grading: Assessment is by lab writeup and interview.

**Stem Cell 5054 Stem Cell Institute Research Seminar and Journal Club**

A-F only, 2 credit(s), max credits 6, 3 completions allowed;  
Instructor: Keirstead, Susan Alice  
Description: The objectives of this course are to expose students to current research in Stem Cell Biology through attendance at weekly seminars and participation in a weekly journal club. Seminars are presented by members of the University of Minnesota research community as well as researchers from elsewhere in the United States and beyond. The journal club provides an opportunity for students to read current primary research papers and to gain insights into the research through discussions of the results and implications of the papers among members of the Stem Cell Institute.  
Style: 45% Discussion, 5% Student Presentation, 50% Guest Speakers.  
Grading: 50% written homework, 40% in-class presentation, 10% class participation.

**Stem Cell 8181 Stem Cell Biology**

3 credit(s); [GCD 4034], [GCD 4161] or equiv or instr consent  
Credit will not be granted if credit has been received for: GCD 4171;  
Instructor: Slack, Jonathan M W  
Description: Course Objectives: The course aims to provide beginning graduate students with an overview of stem cell biology. It will cover the biology of both embryonic and adult stem cells, and be based on principles of developmental biology. Although primarily a biological science course it will include brief consideration of the ethical and legal aspects of embryonic stem cells, and several examples of clinical applications of cell therapy. Students will be expected to read and present primary research literature. Course topics: Embryonic stem cells; biochemistry of pluripotency; neural and hematopoietic stem cells; cell production and renewal in heart, skeletal muscle, pancreas and skin. Ethical and legal issues raised by embryonic stem cell work; clinical cell therapy in selected areas. Course director: Dr Jonathan Slack. Lectures are given by a range of research specialists and clinicians.  
Style: 75% Lecture, 25% Student Presentation.  
Grading: 20% mid exam, 45% final exam, 25% in-class presentation, 10% class participation.  
Exam Format: Two in-class tests Final Exam - take home written exam

Studies in Cinema and Media Culture  

**SCMC 1201 Introduction to Cinema and Media Culture**

4 credit(s); Credit will not be granted if credit has been received for: CSCL 1201; Meets CLE req of Arts/Humanities  
Instructor: STAFF  
Description: The emergence of what is variously referred to as the "Information Age" and "Society of the Spectacle" has made it necessary for us to think critically about the media. Since visual media have the most pervasive influence on our everyday lives, this course will focus on how forms such as advertising, film, and television work, affect perception, and structure meaning. We will read some of the most important theoretical and historical texts that provide insight into our "ways of seeing." No prior exposure to media theory is expected, but although this is an introductory class, students will be expected to read and work through challenging material. We will read a variety of critics who have attempted to analyze cinema and media culture and we will also begin to develop a vocabulary for formal visual analysis.

**SCMC 3001W History of Cinema and Media Culture**

4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Sweet, S. Paige  
Description: Student may contact the instructor or department for information.
SCMC 5002 Advanced Film Analysis
A-F only, 4 credit(s);
Instructor: Mowitt, John W
Description: Variation on a joke: two friends exit a movie theater. Their conversation is animated, even intense. They disagree about the meaning and significance of the film they have just screened. More than a dispute about taste, theirs is a dispute about signs: what did the character actually say? Did the shot frame her from above or below? Was there music throughout the scene, or only when the enemies were not speaking? What music? Does the logic of the narrative statement map the political territory of the "post-911 world"? You get the picture. How do these friends meaningfully and precisely disagree? About what exactly? The intensity of their dispute is only partly about the affect of disputation. It is also about the film. Some "thing" they paid to screen. This course is intended to be an extended application of the technique of "textual analysis" applied, ideally but not necessarily, to a single film. Students will work collaboratively to "read" (discern and interpret) all the component elements (sounds and images) of what the film says and how it says it. The collaborative work will be organized around three "teams" broken down into study groups: the semioticians, the political economists and the philosophers. The objective of the course is to teach students how to develop the analytical skills by which to attach with meticulous precision their interpretation of a film to its actual details.
Style: 40% Lecture, 50% Film/Video, 10% Student Presentation.
Grading: 100% reports/papers.

Studies of Science and Technology 746 Heller Hall

SST 8000 Colloquium
S-N only, 1.5 credit(s), max credits 3;
Instructor: STAFF
Description: This colloquium is a series of weekly lectures by nationally and internationally known scholars with diverse disciplinary and methodological backgrounds speaking on a variety of issues on the philosophy and history of science and technology.

Supply Chain and Operations 3-140 Carlson School of Management

SCO 2550 Business Statistics: Data Sources, Presentation, and Analysis
A-F only, 4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

SCO 3001 Introduction to Operations Management
A-F only, 3 credit(s);
Instructor: STAFF
Description: Basic concepts, principles, and techniques for managing manufacturing and service operations. Emphasis on decision making in the operations function of organizations. Quantitative and qualitative methods for improving the management of operations stressed. Management students provided with an appreciation of the operations function of organizations.
Style: 50% Lecture, 30% Discussion. interactive games
Grading: 20% mid exam, 30% final exam, 10% quizzes, 15% class participation, 25% problem solving.
Exam Format: multiple choice, short answer, problem solving

SCO 3041 Project Management
A-F only, 2 credit(s);
Instructor: Buchner, Thomas Wayne
Description: Student may contact the instructor or department for information.

SCO 3045 Sourcing and Supply Management
A-F only, 2 credit(s);
Instructor: Zhang, Yinghao
Description: Student may contact the instructor or department for information.

SCO 3048 Transportation and Logistics Management
A-F only, 2 credit(s);
Instructor: Beier, Fred J
Description: Student may contact the instructor or department for information.
**SCO 3051 Service Management**
- **A-F only, 2 credit(s);**
- **Instructor:** Goldstein, Susan Meyer
- **Description:** Each of us consumes services and cares about how they are delivered. Services generate nearly 80% of the U.S. GDP and provide billions of dollars in trade surplus. There is a continual need for new services, higher quality services, and more efficient services. In this course, we study many service industries - health care, retail, banking, professional services, and more. We tackle issues unique to managing service organizations. Identifying service needs, designing servicescapes, and managing queues, and - most importantly - managing the people who deliver and consume services. That is, we study the employees, the customers, how to manage them, and how to create the 'right' experience for each and every one. Most of our learning is from case study discussions, which we will have weekly. We also read current and classic articles that articulate the most necessary knowledge on service management.
- **Style:** 25% Lecture, 50% Discussion, 25% Small Group Activities.

**SCO 3056 Supply Chain Planning and Control**
- **A-F only, 4 credit(s);**
- **Instructor:** STAFF
- **Description:** Concepts and principles related to designing, controlling, and improving production and inventory management systems throughout the supply chain. Topics include capacity planning, inventory planning, production planning, forecasting methods, Materiel Requirements Planning (MRP), Just-in-Time, and theory of constraints.

**SCO 3059 Quality Management and Lean Six Sigma**
- **A-F only, 4 credit(s);**
- **Instructor:** STAFF
- **Description:** Planning and organizing performance improvement of processes, products, and services; Six Sigma process management systems; quality aspects of product/service design; quality determination cost, customer/vendor relations; process control; quality control; management of improvement process; and organizational assessment of quality. Introduction to concepts relevant to service/manufacturing.

**SCO 3061 Lean Thinking**
- **A-F only, 2 credit(s);**
- **Instructor:** Shah, Rachna
- **Description:** Student may contact the instructor or department for information.

**SCO 4065W Supply Chain and Operations Strategy**
- **A-F only, 4 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Donohue, Karen Lisa
- **Description:** This course is the Senior Capstone for the Supply Chain and Operations major. As such, we will cover not only the latest concepts in supply chain and operations strategy, but also work to develop the leadership and communication skills necessary to succeed as a supply chain and operations professional. Special emphasis will be placed on developing written communication skills, as evidence by the course's designation as a Writing Intensive (W-I) course. The course will be valuable for students going into consulting, distribution, manufacturing, sourcing, and other supply chain and operations centric careers. Supply chain and operations management has been one of the major growth areas in consulting over the past few years and an increasing number of industries consider expertise in this area vital; these include retailing, high-tech, consumer goods, automotive, chemical, pharmaceutical and food & beverage industries. Students taking this course will learn the fundamentals of successfully exploiting global supply chains by looking strategically at the full supply chain, understanding the total cost economics, and adjusting for the appropriate industry dynamics.
- **Style:** The course is case-based and discussion driven. Class time will be spent discussing cases and assigned readings, taking part in exercises, practicing informal writing, and engaging in interactive lectures. The course will feature a number of guest

**SCO 6041 Project Management**
- **A-F only, 2 credit(s);**
- **Instructor:** Siemsen, Enno
- **Description:** In the course of their careers, contemporary managers will spend a significant amount of time either participating in or leading projects. Projects are frequently used as proving-grounds for high-potentials. The skills that are required in project management are often the very same attributes that are required for successfully managing a business. While every project is by definition unique, some concepts and tools in project management apply to a wide range of different types 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). The goal of this course is neither to further refine existing project-management specialists in their expertise, nor to specifically train students for Project Management Certification. Rather, the objective is to equip business generalists (i.e., any career concentration) with project management related skills that will be useful throughout their careers. With that aim in mind, the course will

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focus on broadly applicable concepts and methods and will cover both qualitative and quantitative aspects of project management.

**Style:** 50% Lecture, 15% Discussion, 25% Small Group Activities, 10% Guest Speakers.

**Grading:** 30% mid exam, 40% reports/papers, 20% written homework, 10% other evaluation.

SCO 6051 Service Management

A-F only, 2 credit(s);
Instructor: Goldstein, Susan Meyer
Description: Each of us consumes services and cares about how they are delivered. Services generate nearly 80% of the U.S. GDP and provide billions of dollars in trade surplus. There is a continual need for new services, higher quality services, and more efficient services. In this course, we study many service industries - health care, retail, banking, professional services. We tackle issues unique to managing service organizations. Identifying service needs, designing servicescapes, and managing queues, and - most importantly - managing the people who deliver and consume services. That is, we study the employees, the customers, how to manage them, and how to create the 'right' experience for each and every one.

SCO 6059 Quality Management and Lean Six Sigma

A-F only, 4 credit(s);
Instructor: Anderson, John C
Description: Student may contact the instructor or department for information.

SCO 8652 Regression Analysis

A-F only, 3 credit(s);
Instructor: Nachtsheim, Christopher John
Description: Student may contact the instructor or department for information.

SCO 8711 Research in Operations Strategy

A-F only, 3 credit(s);
Instructor: Goldstein, Susan Meyer
Description: Student may contact the instructor or department for information.

SCO 8721 Management of Technological Operations

A-F only, 3 credit(s);
Instructor: Sinha, Kingshuk Kanti
Description: Student may contact the instructor or department for information.

Sustainability Studies

190 Coffey Hall

Sust 3003 Sustainable People, Sustainable Planet

3 credit(s); Soph or Jr or Sr Credit will not be granted if credit has been received for: GLOS 3304; Meets CLE req of Environment
Instructor: Philippon, Daniel J
Description: Sustainability recognizes that social equity, environmental integrity, and economic prosperity are all worthy goals, but that these goals compete, so it is difficult if not impossible to maximize all three of them concurrently. Some objectives of sustainability are therefore often realized at the cost of other equally valid objectives. How do we collectively move towards an ideal balance of these different aspects of sustainability? In "Sustainable People, Sustainable Planet" we will approach sustainability from multiple viewpoints and explore various models for understanding sustainability. Through a variety of real-world case studies, we will explore the conflicts and trade-offs that occur from trying to put sustainability into practice. We will also examine different approaches to sustainable living, so you can consider whether and how to integrate sustainability into your own life. "Sustainable People, Sustainable Planet" is intended for sophomores and above. There are no other prerequisites, but you should have previous exposure to critical reading, writing, and thinking. The course currently satisfies the University's liberal education requirement for "Environment Theme." It is also the gateway course into the Sustainability Studies Minor: http://sustainabilitystudies.umn.edu/

**Style:** 50% Lecture, 50% Discussion.
**Grading:** 20% mid exam, 30% final exam, 25% reports/papers, 20% reflection paper, 5% class participation.

Sust 4004 Sustainable Communities

A-F only, 3 credit(s);
Instructor: Mathiowetz, June Louise
Description: Students synthesize multiple disciplinary perspectives and integrate insights gained from various approaches/methods. Concepts/scholarship related to sustainability. Applying knowledge/experience to real sustainability problems.
Sust 4004 Sustainable Communities
A-F only, 3 credit(s);
Instructor: Wanberg, David
Description: Students synthesize multiple disciplinary perspectives and integrate insights gained from various approaches/methods. Concepts/scholarship related to sustainability. Applying knowledge/experience to real sustainability problems.

Sust 4096 Sustainability Internship
A-F only, 1-4 credit(s), max credits 8;
Instructor: Wanberg, David
Description: Five to ten hour per week internship experience related to a sustainability theme or approach, such as sustainable foods, green building, renewable energy or environmental justice. Intern in a nonprofit, governmental, educational or business organization, from choices provided or from a choice of the student and approved by instructor.

Sustainable Agricultural Systems 411 Borlaug Hall

SAgr 8010 Colloquium in Sustainable Agriculture
A-F only, 2 credit(s);
Instructor: Sheaffer, Craig Charles
Description: Study the social, economic, political and environmental aspects of a sustainable agriculture through discussions with experts in the field. Specific topics can include: the history of agriculture and the family farm, government farm policy, the importance of biodiversity for healthy landscapes, rural communities, quality of life, community supported agriculture, organic agriculture, landscape health and non-profit organizations. Teaching approaches will include student, faculty and producer-led discussions. The course will include on-farm visits. Target audience: non-majors and majors interested in sustainable agriculture.

SAgr 8020 Field Experience in Sustainable Agriculture
S-N only, 1-4 credit(s), max credits 3, 1 completion allowed;
Instructor: Jordan, Nicholas Royal
Description: Student may contact the instructor or department for information.

Swahili 808 Social Sciences Tower

Swah 1221 Beginning Swahili, Semester I
5 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Swah 3225 Intermediate Swahili
5 credit(s);
Instructor: Muaka, Angaluki
Description: Student may contact the instructor or department for information.

Swah 4221 Beginning Swahili I
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Swah 4225 Intermediate Swahili
2 credit(s);
Instructor: Muaka, Angaluki
Description: Student may contact the instructor or department for information.

Swedish 320 Folwell Hall

Swed 1001 Beginning Swedish
5 credit(s); Credit will not be granted if credit has been received for: SWED 4001;
Instructor: STAFF
Description: This is the first course in the first-year language instruction sequence (1001-2), designed to develop a basic
communicative proficiency in Swedish. Students will practice the four language skills (speaking, writing, reading, and listening) and learn to handle simple, everyday transactions. Class sessions will emphasize interactive communicative activities in pairs and small groups, with a focus on improving listening and speaking skills. Additional class time will be spent on reading, writing, and grammar. Students are expected to practice these skills outside of class as well. Learning about life and culture in Sweden is an integral part of the course. See the description for Swed 4001 for an option for qualified students to register for this course for 2 credits (and lower tuition) instead of 4 credits.

**Style:** 10% Lecture, 70% Discussion, 20% Laboratory.

**Grading:** 100% other evaluation. 50% reading/writing, 50% oral/aural

**Exam Format:** structured exercises in all 4 modalities and grammar, pronunciation, vocabulary and culture

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### Swed 1001 Beginning Swedish

5 credit(s); Credit will not be granted if credit has been received for: SWED 4001;  
**Instructor:** Herrlin,Susanne Marie

**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Swedish belongs to the northern group of the Germanic languages and as such is closely related to Icelandic, Danish, and Norwegian. If you master Swedish it is very easy to comprehend Danish and Norwegian, and vice versa. Because English belongs to the western group of the Germanic languages, there are many points of intersection in syntax and vocabulary between Swedish and English. As you study Swedish you will learn a good deal about English and become conscious of its family resemblance to Swedish. Both the oral and written Swedish used in the course materials are standard Swedish. This is the generally accepted form of Swedish, and has little difference between spoken and written forms.

**Style:** This is a printed correspondence section.

**Grading:** Average for the written assignments = 70% Required recordings = 30%

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### Swed 1002 Beginning Swedish

5 credit(s); Credit will not be granted if credit has been received for: SWED 4002;  
**Instructor:** Herrlin,Susanne Marie

**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Swedish belongs to the northern group of the Germanic languages and as such is closely related to Icelandic, Danish, and Norwegian. There are differences in pronunciation, spelling, and vocabulary among the Germanic languages, but these are minor. If you master Swedish it is very easy to comprehend Danish and Norwegian, and vice versa. Because English belongs to the western group of the Germanic languages, there are many points of intersection in syntax and vocabulary between Swedish and English. As you study Swedish you will learn a good deal about English and become conscious of its family resemblance to Swedish. Both the oral and written Swedish used in the course materials are standard Swedish.

**Style:** This is a printed correspondence section.

**Grading:** Average for the written assignments--70 percent Your self-recordings--30 percent

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### Swed 1003 Intermediate Swedish

5 credit(s); Credit will not be granted if credit has been received for: SWED 4003;  
**Instructor:** STAFF

**Description:** This course continues the presentation of language skills--speaking, writing, listening and reading begun in Swedish 1001-2 (or quarter system courses 1101-2-3). Students will review, examine and develop these skills through a content-based curriculum. Students will be introduced to a variety of Swedish texts--stories, songs, newspaper articles, video and Internet resources. The review of basic points of Swedish grammar with an emphasis on sentence structure and word order will enable students to improve their writing skills in connection with process-oriented writing assignments. Vocabulary building will be supported by a rich array of texts that the students will be reading during their second year. Speaking and listening will be practiced in role play activities involving representative social situations. The interactive will familiarize students with the different levels of formality and intimacy used in conversational settings, and the codes and mythologies unique to Swedish culture. See the description for Swed 4003 for an option for qualified students to register for this course for 2 credits (and lower tuition) instead of 4 credits.

**Style:** 10% Lecture, 70% Discussion, 20% Laboratory.

**Grading:** 100% other evaluation. 50% reading/writing, 50% oral/aural

**Exam Format:** written essays, listening and reading protocols, structural exercises, oral interviews

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### Swed 4001 Beginning Swedish

2 credit(s); Credit will not be granted if credit has been received for: SWED 1001;  
**Instructor:** STAFF

**Description:** See the course description for Swed 1001. This 4xxx-level course designator is a special option for qualified students to...
take the 1xxx-level course for reduced credits. If you have already passed the Graduation Proficiency Test (GPT) in another language or are a graduate student or are not seeking a CLA degree, you may register for Swed 1001 under the number Swed 4001 for 2 credits. Contact the department office, (612) 625-2080, for permission.

**Swed 4003 Intermediate Swedish**

2 credit(s); 1004 in another language or passing score on LPE or grad student
Credit will not be granted if credit has been received for: SWED 1003;
Instructor: STAFF
Description: See the course description for Swed 1003. This 4xxx-level course designator is a special option for qualified students to take the 1xxx-level course for reduced credits. If you have already passed the Graduation Proficiency Test (GPT) in another language or are a graduate student of are not seeking a CLA degree, you may register for Swed 1003 under the number Swed 4003 for 2 credits. Contact the department office, (612) 625-2080, for permission.

**TMJ/Craniofacial Pain**

15-209 Malcolm Moos Health Sciences Tower

**TMJP 8441 Seminar in TMJ and Craniofacial Pain**

A-F only, 1 credit(s);
Instructor: Giri,Subha
Description: Student may contact the instructor or department for information.

**TMJP 8442 Advanced Clinical TMJ and Craniofacial Pain**

A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Mulet Pradera DDS,MS,Mariona
Description: This course provides the student with clinical experience in the diagnosis and management of TMD, complex chronic orofacial pain and oral medicine conditions under the supervision of the course director and/or other faculty. A multidisciplinary treatment approach of patients with TMD and orofacial pain is used.

**Theatre Arts**

580 Rarig Center

**Th 1101V Honors Section: Introduction to the Theater**

A-F only, 4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Kuftinec,Sonja
Description: Description: TH1101 is an entertaining, informative exploration of the art and profession of theatre. This course integrates intellectual stimulation with creative expression through lectures, small group discussion, and attending live performances. Students study plays (historical and contemporary), elements of production, and learn how a play evolves from page to stage. Students also get a hands-on opportunity to collaborate on the creative project (no prior experience required). TH1101 promotes collaboration and critical thinking, enhances oral communication skills and the creative application of knowledge. Mosty, Introduction to Theater explores the human experience through intersections of art, history, and culture through collaborative exchange. Meets Lib Ed req of Arts & Humanities Core and is a Writing Intensive class.

**Th 1101W Introduction to the Theatre**

4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Kuftinec,Sonja
Description: Description: TH1101 is an entertaining, informative exploration of the art and profession of theatre. This course integrates intellectual stimulation with creative expression through lectures, small group discussion, and attending live performances. Students study plays (historical and contemporary), elements of production, and learn how a play evolves from page to stage. Students also get a hands-on opportunity to collaborate on the creative project (no prior experience required). TH1101 promotes collaboration and critical thinking, enhances oral communication skills and the creative application of knowledge. Mosty, Introduction to Theater explores the human experience through intersections of art, history, and culture through collaborative exchange. Meets Lib Ed req of Arts & Humanities Core and is a Writing Intensive class.

**Th 1102 Drama and the Media**

3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Werry,Margaret L
Description: In this course, we will explore what drama is and does in different media. We ask how drama relates to our daily lives, as well as to our ideas about society, family, politics, technology, imagination, and media itself. Students learn to interpret television, cinema, and radio dramas with attention to elements of dramatic technique, and through analytic and creative activities, they investigate the ways in which different media can open up new possibilities for dramatic expression. We examine the ways in which
cultural, social, and economic factors shape the form drama takes and the stories it tells. Lectures and readings introduce a range of approaches that cultural theorists have developed to explain the popularity and effects of drama in different media. And we put these to the test in class discussions and in responses to a variety of films and television examples viewed in class. This course is appropriate for students of all majors and has no pre-requisites, except an interest in popular culture and a willingness to grapple with challenging questions about an aspect of American life we normally take for granted. This course will be web enhanced but the URL is not yet available.

**Style:** 30% Lecture, 30% Discussion. class workshops and viewing videos

**Grading:** 25% mid exam, 25% final exam, 15% reports/papers, 15% special projects, 20% class participation.

**Exam Format:** essay and short question

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**Th 1301 Acting/Non-Majors**

3 credit(s);

**Instructor:** STAFF

**Description:** This course is designed to enable students without prior experience in theatre to better appreciate theatrical elements, develop a vocabulary for discussing theatre, and recognize the degree to which the study of basic acting techniques can inform perceptions of self and others. Students are taught how to act within imaginary circumstances, make bold choices, and develop interpersonal trust and ensemble awareness. Required text: ACTING ONE by Robert Cohen.

**Style:** 10% Discussion, 90% Laboratory.

**Grading:** 25% reports/papers, 25% in-class presentation, 20% other evaluation. Attendance & Participation; 25% Attitude & Growth.

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**Th 1321 Beginning Acting: Fundamentals of Performance**

3 credit(s);

**Instructor:** STAFF

**Description:** Introduces beginning students to a widely applicable, comprehensive vocabulary and techniques for practical performance studies, including the use and training of the instrument; the creation of theatrical ideas or choices; the creation of dramatic &quot;phrases&quot; by sequencing ideas and choices to tell stories; and the significance of circumstances for choice making. The course has three overarching objectives: providing an introduction to creation processes specific to the performer, psychological and physical training of the acting instrument, and training the personal imagination. The first part of a two-course sequence (with TH 1322, Creating the Performance) intended for theatre arts majors. Required reading: A compilation of performance processes, theories and techniques including: Lecoq, Grotowski, Stanislavski, Meyerhold, Chekov, etc.

**Style:** 10% Discussion, 90% Laboratory.

**Grading:** 25% reports/papers, 25% in-class presentation, 20% other evaluation. Attendance & Participation; 25% Attitude & Growth.

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**Th 1322 Creating the Performance**

3 credit(s);

**Instructor:** Seifert,Luverne G

**Description:** Student may contact the instructor or department for information.

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**Th 1361 Singing for Musical Theatre**

A-F only, 3 credit(s);

**Instructor:** Nash,Elizabeth

**Description:** The focus of this course is on singing, interpretation, and audition techniques for Musical Theatre, culminating in solo and ensemble presentations at a final class performance. Since each student is instructed individually, all vocal levels, from beginning to advanced, are welcome in this class. Due to the ensemble and performing emphasis of this course, attendance is required and will figure in grading.

**Style:** vocal performance

**Grading:** 10% final exam, 10% reports/papers, 80% in-class presentation.

**Exam Format:** vocal performance

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**Th 1391 BFA Acting I**

A-F only, 3 credit(s);

**Instructor:** Cardamone,Steve

**Description:** Student may contact the instructor or department for information.
Th 1392 BFA Voice and Speech I
A-F only, 2 credit(s);
Instructor: Holshue, Lucinda A
Description: Student may contact the instructor or department for information.

Th 1393 BFA Movement I
A-F only, 2 credit(s);
Instructor: Weaver, Margie E
Description: Student may contact the instructor or department for information.

Th 1501 Introduction to Design and Technology for Live Performance
A-F only, 3 credit(s);
Instructor: Dilliard, Marcus F
Description: Student may contact the instructor or department for information.

Th 1905 Freshman Seminar: Great Actresses & Divas of Theatre, Film, & Opera
A-F only, 3 credit(s), max credits 6;
Instructor: Nash, Elizabeth
Description: The focus of this seminar is to serve as an overview of the outstanding actresses and divas from Byzantium's Empress Theodora in the sixth century to America's Barbra Streisand in the twenty-first. The activities of their male contemporaries are well documented, but the female performers have been sadly neglected. The names of Sarah Bernhardt, Maria Callas, Meryl Streep and Julie Andrews are generally recognized, but what about Isabella Andreini, Lillian Gish, Camilla Williams and Josephine Baker? All have made unique contributions to the theatre, films, opera and musicals as leading female performers of their time. They were and are the role models to serve as an inspiration to future generations. The classes will consist of lectures, discussions, videos, CDs and student oral reports on individually selected stage, film or singing actresses. For ten years, Dr. Elizabeth Nash was a leading coloratura soprano in European opera houses. She is the author of the biographies Always First Class: The Career of Geraldine Farrar, The Luminous Ones: A History of the Great Actresses; Pieces of Rainbow; The Memoirs of Sylvia Olden Lee: Premier African-American Classical Vocal Coach and Autobiographical Reminiscences of African-American Classical Singers, 1853-Present.

Th 1905 Freshman Seminar: The Art of Collaboration
A-F only, 3 credit(s), max credits 6;
Instructor: Sommers, Michael J
Description: Student may contact the instructor or department for information.

Th 1905 Freshman Seminar: Backstage Pass to the Performing Arts
A-F only, 3 credit(s), max credits 6;
Instructor: Behl, Dennis L
Description: Student may contact the instructor or department for information.

Th 2391 BFA Acting III
A-F only, 3 credit(s);
Instructor: Cardamone, Steve
Description: Student may contact the instructor or department for information.

Th 2392 BFA Voice and Speech III
A-F only, 2 credit(s);
Instructor: Cooke, Andrew
Description: Student may contact the instructor or department for information.

Th 2393 BFA Movement III
A-F only, 2 credit(s);
Instructor: Wallum, Tina Anderson
Description: Student may contact the instructor or department for information.

Th 3100 Theatre Practicum
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: STAFF
Description: Do you want to get involved in production on the Main Season for University Theatre? This is a course that can give you
that opportunity. You will be assigned a specific position on a production and get a chance to work on as well as see first hand what goes into a full scale theatrical production. Come and explore the possibilities.

**Style:** 5% Lecture, 95% Laboratory.

**Grading:** 5% class participation, 95% laboratory evaluation.

**Th 3115 Introduction to Playwriting**
- 3 credit(s);
- **Instructor:** Taylor,Dominic A
- **Description:** Student may contact the instructor or department for information.

**Th 3171 History of the Theatre: Ancient Greece Through Neo-Classicism**
- 3 credit(s);
- **Instructor:** Daddario,Will
- **Description:** Student may contact the instructor or department for information.

**Th 3322 Advanced Techniques for Characterization**
- 3 credit(s);
- **Instructor:** Kingsley,Barbara
- **Description:** Student may contact the instructor or department for information.

**Th 3330 Physical Approaches to Acting**
- 3 credit(s), max credits 6;
- **Instructor:** Seifert,Luverne G
- **Description:** Physical approaches to acting will intensely explore the psychophysical methodology of Jacques Lecoq with emphasis on neutral mask, acrobatics, commedia, clowning and buffooning. The course will investigate poetic, tragic and playful performance through the analysis of movement and gesture. Students will create solo and collaborative performances. Entrance is by audition after completion of 1321 Fundamentals of Performance and 1322 Creating the Performance. Required reading: The Moving Body by Jacques Lecoq, Invisible Cities by Italo Calvino and selected plays and readings.
- **Style:** 10% Lecture, 10% Discussion, 80% Laboratory.
- **Grading:** 20% reports/papers, 30% in-class presentation, 50% class participation.

**Th 3521 Introduction to Scenic Design for Theater and Performance**
- 3 credit(s);
- **Instructor:** Brockman,C Lance
- **Description:** This course provides students with basic information on the creative process of scenic/properties design for the theatre and performance. Students are asked to assume the role of scene designer and through a series of exercises, approximate the creative steps in developing an environment--in both scaled model and/or sketch--for the stage or live performance. Skills developed include basic representational drawing for value, painting with color, and drafting necessary for execution of designs. As with the process of designing in the 'real world', success depends on a systematic execution of each step along the way.

**Th 3571 Introduction to Stage Technology**
- A-F only, 3 credit(s);
- **Instructor:** Rosvold,Roger
- **Description:** Student may contact the instructor or department for information.

**Th 3716 Stage Management**
- A-F only, 4 credit(s);
- **Instructor:** Swartwout,Christine M
- **Description:** Student may contact the instructor or department for information.

**Th 3950 Topics in Theatre: BA Mentoring**
- 1 credit(s), max credits 8, 8 completions allowed;
- **Instructor:** Seifert,Luverne G
- **Description:** Student may contact the instructor or department for information.

**Th 3950 Topics in Theatre: Advanced Improvisation**
- 3 credit(s), max credits 8, 8 completions allowed;
- **Instructor:** Channer,Lisa E
**Th 4177W Survey of Dramatic Literature I: Strategic Interpretation**
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Daddario, Will
*Description:* Student may contact the instructor or department for information.

**Th 4321 Career Preparation for the Actor**
3 credit(s);
Instructor: Diercks, Shirley V
*Description:* A comprehensive look at the world of Theatre that awaits today's young graduates. This class is intended to provide exposure to the myriad paths available to theatre majors upon completion of their formal education. The class will be comprised of discussions with varying personalities who have achieved a modicum of "success" measured by their own ambitions as well as the standards set by our profession. Students will also venture into the community at large and interview a specialist of their choosing and submit a written report as well as make a formal class presentation. We will also be devoting significant time in and outside of class to research the necessary tools of the trade - photos, resumes, contact sheets, and of utmost importance, the student's audition materials.
*Style:* 10% Lecture, 20% Discussion, 30% Laboratory, 30% Student Presentation, 10% Guest Speakers.
*Grading:* 30% attendance, 10% journal, 30% in-class presentation, 30% laboratory evaluation. This class is a laboratory/skill improvement class, and participation is key. Growth in performing for a professional career in Theatre and all related fields of opportunity.

**Th 4322 Acting for the Camera**
3 credit(s);
Instructor: Diercks, Shirley V
*Description:* This is a valuable course to help the actor/student interested in film, to find, through varied assignments their adaptability to the camera. The participant should be prepared to be on-camera most class days. We will assign storytelling, editorial presentation, industrial exercises, and finaly performance in a short film scene with full preparation as to memory, scenic design and props, appropriate lighting and setting. There will be a crew of students to assist the Professor and TA in these productions. All will be followed by the student participation in the editing process of their own work. Welcome to the world of the camera Shirley Venard
*Grading:* 10% reports/papers, 10% quizzes, 60% in-class presentation, 20% class participation. "It is unnecessary to give a percentage amount to 'attendance'as none of the above percentages will be possible if you are not there."
*Exam Format:* Quizzes and then a final paper to serve as an exam.

**Th 4380 Creative Collaboration**
1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: STAFF
*Description:* Ensemble creation of a single theatre performance work. Creative/dramaturgical work. Public showing of work, completed or in-progress. Students work collaboratively with faculty or affiliate guest artists.

**Th 4391 BFA Intensive II**
A-F only, 2 credit(s);
Instructor: Lorca, Marcella Kingman
*Description:* Student may contact the instructor or department for information.

**Th 4393 BFA Rehearsal and Performance III**
A-F only, 2 credit(s);
Instructor: Cardamone, Steve
*Description:* Student may contact the instructor or department for information.

**Th 4394 BFA Rehearsal and Performance IV**
A-F only, 2 credit(s);
Instructor: Lorca, Marcella Kingman
*Description:* Student may contact the instructor or department for information.

**Th 4532 Makeup for the Actor**
2 credit(s);
Instructor: Bundick, Theresa Jane
*Description:* Student may contact the instructor or department for information.
Th 4555 Audio Technology
3 credit(s);
Instructor: Johnson, Montana J
Description: Students will learn the fundamental principles of how sound works in a space, how audio information is converted into electrical energy and manipulated, and how to record quality audio and set up for live sound reinforcement. Class has a strong hands on component, in order to help students understand the technology they are working with. Students will also work with basic audio editing and effects processing, as well as both analog and digital audio.

Th 4711 Intermediate Stage Direction
3 credit(s);
Instructor: Taylor, Dominic A
Description: Student may contact the instructor or department for information.

Th 4901 Senior Seminar
S-N only, 2 credit(s); Sr, [Th or Dnce major] Credit will not be granted if credit has been received for: DNCE 4901;
Instructor: Sommers, Michael J
Description: Student may contact the instructor or department for information.

Th 4905H Honors: Tutorial Seminar in Theatre Arts
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Th 5100 Theatre Practicum
1-4 credit(s), max credits 20, 10 completions allowed;
Instructor: STAFF
Description: Individual creative projects in production of approved plays as an actor, director, dramaturg or playwright.

Th 5117 Performance and Social Change
A-F only, 3 credit(s);
Instructor: Kuftinec, Sonja
Description: Co-taught with Maria Asp (Children's Theatre) this class provides internship opportunities with Neighborhood Bridges (an arts literacy program in K-12 schools), Washburn High school's theater classes, and St. Paul Central High school's theater classes, arts literacy, and Seeds of Change program-- a support group by and for African American males and their allies addressing the educational achievement gap. The class meets once a week for skill-building, scholarly framing, and reflections on the process of becoming a teaching artist. Graduate students may use the class as an opportunity for participatory action research with the above listed sites. Readings/framings include Paulo Freire, bell hooks, Michel Foucault, Bill Ayers, Augusto Boal, Jack Zipes, Cynthia Lewis, Henry Giroux and others. AN INTERVIEW WITH INSTRUCTOR IS REQUIRED TO SET UP INTERNSHIP COMPONENT OF THE COURSE.
Style: 10% Lecture, 25% Discussion, 25% Small Group Activities, 25% Student Presentation, 15% Demonstration. performance workshops; As embodied learning exemplifies the pedagogical approach of this activist course, students will research contemporary, local and historical projects as well as create their own.
Grading: 25% reports/papers, 25% special projects, 25% in-class presentation, 25% class participation.

Th 5340 Tragedy/Poetry: Advanced Physical Performance Studio
A-F only, 3 credit(s), max credits 6;
Instructor: Berlovitz, Barbra Ann
Description: The class offers you the tools to create physically engaged performances. Shakespeare's texts will be used as the motor to explore non realistic, heightened theater. You will experience exercises to improve your breaths involvement in your work, increase your imagination and be present on the stage and in rehearsal. Habits that have formed in the body will be worked on to free the voice and allow its true potential to exist. Improvisation and games will be used as tools to help define the ideas of balance, space and creativity. A minimal amount of time will be spent reviewing the fundamentals of speaking a heightened language. There will be various books to consult and at least one to read. Speaking Shakespeare by Patsy Rodenburg is required reading for this class. Texts will need to be memorized. Students are asked to review one play during the semester and write journals about their work during the semester.

Th 5355 Puppetry: Techniques and Practice in Contemporary Theater
3 credit(s);
Th 5500 Theatre Design Practicum
1-3 credit(s), max credits 20, 10 completions allowed;
Instructor: STAFF
Description: Individual projects in production of approved plays as a designer for scenery/properties, costumes, lighting or sound.
Style: 100% Laboratory.
Grading: 100% other evaluation. final production and prep work

Th 5510 Drawing, Rendering, and Painting for the Theatre Designer I
3 credit(s);
Instructor: Brockman, C Lance
Description: This course is designed to help students of theatre and performance develop a basic visual vocabulary necessary to create set, light and costume designs. Much of the work in this course is directed to honing skills of seeing and representational drawing and painting. Students will experience a series of exercises that stress the importance of line and the use of value as a means of creating a three-dimensional object on the blank page. In the last weeks of the course, students will work to apply visual styles to create visual sketches appropriate for interpretative performances. Previous experience is not necessary but the only prerequisite is a willingness to challenge your perception skills coupled with the overall desire to further develop visual literacy.

Th 5530 Costume Design
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Lefebvre, Matthew James
Description: Student may contact the instructor or department for information.

Th 5540 Lighting Design for the Theatre
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Dilliard, Marcus F
Description: Student may contact the instructor or department for information.

Th 5570 Properties/Scenery Technology
1-3 credit(s), max credits 15, 15 completions allowed;
Instructor: Gwinup, Martin Bruce
Description: ADVANCED SCENIC TECHNOLOGY This course will build off of TH3571 - Introduction to Stage Technology and/or basic stagecraft courses that the student may have taken. The areas that the course will be looking into: Advanced Construction - we will discuss and work with different materials, hardware, and tools studying their properties and potential uses. We will explore construction techniques and processes for different types of scenic elements. We will look at structural analysis and learn techniques to analyze situations and arrive at safe solutions. Stage Mechanics/Movement - here we will look at different techniques of engineering, constructing, and manipulating moving scenic units including wagons, curtains, traps, and basic rigging. Managing Construction - here we will take what we have learned so far and explore ways of planning construction and to communicate ideas while working with a staff of technicians to achieve those ideas. We will also look at how one might plan out a job within the given resources of time, space, personnel, equipment, and money. Career Preparation in the field - Lastly we will look at careers in the field and discuss how to prepare to step into the job market and succeed in the field. There will be projects related to each area. Some will require time in the shops outside of class. There will be times we work on projects together as well as individually. The structure of the course allows the student to explore their specific interests within the topics of the course.
Style: 30% Lecture, 40% Laboratory, 30% Demonstration.
Grading: 50% special projects, 15% quizzes, 15% written homework, 5% in-class presentation, 5% class participation, 10% laboratory evaluation.

Th 5580 Costume Technology
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Binder-Pettigrew, Susan M
Description: The emphasis for the Fall 2011 will be Pattern Making. We will explore pattern making by the flat pattern and draping methods. The experience will culminate in a final project using both techniques patterning and making a period bodice.

Th 5580 Costume Technology
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Moriarity-Dahlberg, Andrea Lee
Description: Student may contact the instructor or department for information.
Th 5590 Theatre Technology Practicum
1-3 credit(s), max credits 15, 15 completions allowed;
Instructor: STAFF
Description: Individual creative projects in the technology or craft areas of theatre that further practical skills or knowledge in the fields of costume, lighting, makeup, props, scenery, sound, or theatre management.

Th 5716 Stage Management for the Theatre
4 credit(s);
Instructor: Swartwout, Christine M
Description: Student may contact the instructor or department for information.

Th 5760 Advanced Stage Management
2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Swartwout, Christine M
Description: Student may contact the instructor or department for information.

Th 5950 Topics in Theatre: Multimedia Design & Development
3 credit(s), max credits 20, 20 completions allowed;
Instructor: Gwinup, Martin Bruce
Description: MULTIMEDIA DESIGN & DEVELOPMENT Are you interested in the use of projections in live performance? Are you interested in designing content for projections to serve as backgrounds, storytelling, interactive events, etc.? Then this could be a course for you. The focus of this course is to develop skills and creativity in designing and creating Multimedia (moving image, still image, animation, text, morphs, sound, etc) for live performance. The course will work on a number of topics in the field including; communication and collaboration with the rest of the artistic team (director, choreographer, other designers?); ways to incorporate the images into the production and supporting the action and storytelling on stage; use of software and other technologies for design and development; technologies and techniques to incorporate interactivity between performers and projections (and possibly audience); paperwork, organization and communication to bring everything to a successful conclusion. Projects will include designing with multimedia and working with software and technologies to develop individual and group presentations. This course is about development and will not get into the specifics of projectors, playback, projection surfaces, and systems design and hook up. We will discuss these things in this course far enough to support the class projects. This will be covered in TH5554 Multimedia for Live Performance. That course will be taught in the following year. This course has no prerequisites however the student may find it beneficial if they have some background or course work in video and or audio.
Style: 20% Lecture, 15% Discussion, 45% Laboratory, 10% Student Presentation, 10% Demonstration.
Grading: 60% special projects, 5% attendance, 15% in-class presentation, 10% class participation, 10% problem solving.

Th 5993 Directed Study
1-5 credit(s), max credits 20, 20 completions allowed;
Instructor: STAFF
Description: Guided individual reading or study.

Th 8113 History and Theory of Western Theatre: National Theatres to the French Revolution
3 credit(s);
Instructor: Kobialka, Michal A
Description: Student may contact the instructor or department for information.

Th 8500 Theatre Design Practicum
1-3 credit(s), max credits 20, 20 completions allowed;
Instructor: Lefebvre, Matthew James
Description: Student may contact the instructor or department for information.

Th 8590 Theatre Technology Practicum
1-3 credit(s), max credits 20, 20 completions allowed;
Instructor: Lefebvre, Matthew James
Description: Student may contact the instructor or department for information.

Th 8950 Topics in Theatre: MFA - Professional Development Workshop
1 credit(s), max credits 8;
Th 8950 Topics in Theatre: Pedagogy & Professionalization I
2 credit(s), max credits 8;
Instructor: Werry, Margaret L
Description: Student may contact the instructor or department for information.

Th 8990 MFA Creative Thesis
3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Dilliard, Marcus F
Description: Student may contact the instructor or department for information.

Therapeutic Radiology  M-26 Masonic Cancer Ctr (Box 494)